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ABSTRACT

This book presents selections from seminars whose purpose was to provide American teacher educators and faculty from related disciplines with a first-hand exposure to the modernization process in the Arab Republic of Egypt. The analysis of this topic focuses on three major areas affected in the modernization process: education, culture, and economic development. (The book is divided into sections for each of these areas as well as a fourth section which presents an orientation and general introduction to Egypt.) The contributors present an overview of the impact of modernization on Egyptian life and institutions. The specific topics covered under the three general themes of education, culture, and economic development are diverse. The volume, therefore, presents a series of perspectives rather than a set of closely integrated sector analyses; the perspectives, however, are those of Egyptian specialists in three areas. (Author/JA)

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EDUCATION AND MODERNIZATION IN EGYPT

Selections from Seminars Organized

BY

AIN SHAMS UNIVERSITY, CAIRO

FOR

THE AMERICAN ASSOCIATION
OF COLLEGES FOR TEACHER EDUCATION

(1972 and 1973)

YUSEF SALAH EL-DIN KOTB
Editor

AIN SHAMS UNIVERSITY PRESS

PREFACE

By

FRANK H. KLASSEN *

This volume presents a series of lectures by educators, scholars and government officials on the modernization process in Egypt. The analysis of this topic focuses on three major areas affected by the process : education, culture and economic development. The contributors present an overview of the pervasive impact of the modernization process on Egyptian life and institutions. Planned change toward improvement in the quality of life becomes both a goal to be achieved and an organizing principle to guide social interaction and the allocation of society's resources. The impetus toward change is based on the aspirations of broad segments of society whose members must share the responsibilities that come with modernization and learn to cope with the threat to prevailing values, social arrangements and inherited privilege.

Contributors to this volume attempt to describe and analyse the broad guaged impact of modernization on Egypt and to detail the new objectives, functions and roles that various social agencies, such as education, are acquiring in the process. The specific topics covered under the three general themes of education, culture and economic development are diverse. The reader is thus presented with a series of perspectives rather than a set of closely integrated sector analyses. The perspectives, however, are those of Egyptian specialists whose research, experience and planning responsibilities have given them a special insight into the dynamics of the modernization process.

The publication of this resource book on Egyptian development is a product of international collaboration between Ain Shams University and the American Association of Colleges for Teacher Education. In 1972 and 1973, Dr. Yusef Salah El-Din Kotb, former president of Ain Shams University and AACTE established a faculty seminar series on Egypt for American college and university personnel with the support of grants from the Institute of International Studies, USOE. The purpose of the seminars was to provide American teacher educators and faculty from related disciplines with an international, instructional experience under the tutelage of specialists from another culture - an experience that would lead to the incorporation of an international dimension in American education. Through this publication the intellectual output of the seminars is made available to a broader educational public leading, hopefully, to an increased understanding of contemporary Egypt and to stronger ties between Egyptian and American faculty and institutions.

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* Associate Director of the American Association of Colleges for Teacher Education (AACTE).

The impact of this international collaboration has been further enhanced by inter-institutional cooperation in the United States which was coordinated by the Pennsylvania Council for International Education and a consortium of institutions in Colorado and Utah under the leadership of Southern Colorado State College and AACTE. The AACTE asknowledges with appreciation its debt to Ain Shams University, Dr. Salah Kotb, the contributors to this volume and the American participants in the program.

FACULTY DEVELOPMENT PROJECTS IN EGYPT

1972 and 1973

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Some Guided Visits and Receptions for the Seminar Groups for Background Information about Education and Modernization in Egypt.

- Ain Shams University
- Faculty of Education, Ain Shams University, to meet Faculty members.
- The Students' Union of Ain Shams University, to meet some of the students.
- The Faculty Club of Ain Shams University, to meet Faculty members.
- The Commencement for the Graduante Studies, Ain Shams University.
- The University of Alexandria.
- The American University in Cairo.
- The Higher Institute of Technology at Helwan.
- The National Center for Scientific Research, Dokki.
- Ain Shams Sporting Club (a whole day).
- Sers El-Layan Center for Functional Literacy.
- The Audio Visual Aids Center, Ministry of Education.
- The Syndicate of Teaching Professions.
- Broadcasting and Television Building.
- Musical Programme at Sayed Darwesh Concert Hall.
- Concert given by Gifted Children at the Conservatoire.
- The modern Arts Museum at Alexandria.
- The Ahram Studio for movies industry.
- The National Troop (a show) in Alexandria.
- The Building of Al-Ahram Newspaper and visiting M. H. Heikel editor in chief.
- Open Discussion with Dr. Hafez Ghanem, First Secretary of the Arab Socialist Union.
- The Arab League.
- The National Assembly and Visiting its President.
- The City of the Women's Health Improvement Association, Giza.
- The Iron and Steel Complex at Helwan.
- Tahreer Province.
- The Governor of Alexandria.
- Kafr El-Dawar Weaving and Spinning Factories.
- Kima Company at Aswan.
- Governor of Aswan.
- The Island of Elephantine at Aswan.
- The Regional Planning Center at Aswan for Development of Human Resources, Mining and Agriculture, Transport and Communications.
- The High Dam, and Nasser's Lake.
- Abu Simbel Temple.
- The Pyramids of Giza, Sphinx, Memphis, Sakkara.
- Luxor Temples (King's Valley, El-Karnak and Luxor).

— Tour in Modern Cairo and Modern Alexandria.

— Old Cairo : Churches, Mosques and Synagouge.

— The Tower of Cairo.

— The Sound and Light at Giza.

— The Greco-Roman Museum, Pompey's Pillar and the Old City, Alexandria.

— The Aquarium and Citadel of Quayetbay at Alexandria.

— Montazah Beach at Alexandria.

— Museum of Ex-King Farouk's Palace.

— Sidi Abdel Rahman Beach.

— El-Alamein Museum and the Cemeteries of Word War II Soldiers.

— The Mauselum of the Agakhan, a fine example of modern Islamic Architecture, at Aswan.

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General Orientation and Introduction to Egypt :

INTRODUCTION

By

Yusef Salah El-Din Kotb *

In the summer of 1972 Ain Shams University organized an eight-week seminar for the American Association of Collages for Teacher Education (AACTE). The seminar was attended by a group of American college and university professors from member institutions of the AACTE. A similar cooperative programme was organized in the summer of 1973. In both cases the purpose was to promote intercultural relations and broaden the international perspective of professors in the United States and the Arab Republic of Egypt.. More specifically, the seminar lecture programme and related activities were :

1. to provide American professors first-hand exposure to the modernization process in the A.R.E. and to the problems and prospects involved in this process.

2. to analyze the relationships between educational planning and modernization in the A.R.E.

3. to refine knowledge of education and modernization in Egypt for dissemination through the educational programmes of the member institutions of the AACTE and the communities served by them.

4. to promote professional relationships between American and Egyptian educators.

Realization of these objectives, and indeed the very elaboration of the programme activities themselves, was a responsibility shared by the AACTE, the individual participants, and our own University staff. Both seminars demanded highly intensive and personal commitments on the part of Americans and Egyptians. The participants, lectures, administrative staff, government officials and others who were involved in the rich array of supporting visits and other activities for the seminar all deserve thanks for their important contributions.

(*) Former President of Ain Shams University; Director of the AACTE Seminars in Egypt in 1972 and 1973.

A significant fact about the seminars is that in each case both Americans and Egyptians welcomed the opportunity to strengthen and broaden relations with educators of the others' country. Such « people-to-people » contact is of inestimable value in increasing international understanding. I, for one, would hope that in the future ways may be found to build upon the modest experience of this seminar to develop even greater understanding. There are numerous possibilities for seminars on similar or very different subjects. Exchange of educational personnel between America and Egypt would be worthwhile; so too would be an organized effort to increase the flow of correspondence and educational material between Egypt and the USA. The latter might include exchange of educational journals, development of joint research projects, and joint sessions at international meetings.

The present volume of papers, essays, and lectures represents the substance of the views presented by Egyptian scholars and officials to the seminar groups of 1972 and 1973. The first group of selections provides a general introduction to Egypt and an orientation to living in a forgein culture. The second takes up the history and cultural heritage of Egypt — a legacy partly shared with Western Civilization and one which provides the framework within which modernization efforts in Egypt must take place. The third group of selections take up the modernization process itself — a process which must spring from the past while maintaining a determined eye toward the future. The fourth and final section treats the ways in which the educational system has been planned to support the modernization effort.

The lectures included herein are in no way meant to provide total coverage of all subjects mentioned, nor do they represent all potentially worthwhile areas of inquiry.

Each work is the responsibility of the individual author. None are necessarily meant to be accepted uncritically. Each is included because it is representative of genuine Egyptian expressions, thoughts, and feeling. If non-Egyptians are to understand the people, culture, and society of Egypt, there is surely merit in their beginning with the way Egyptians themselves view their own past, present, and future. It is felt that the lectures, visits interviews, and other related activities helped the study groups understand the rich heritage, history, and culture that Egypt has developed, preserved, and passed on to Western Civilization.

In that sense one must realize that all cultures are dynamic and that within the many cultures change is an important characteristic.

Egypt, obviously, has been no exveption. However, since the revolution of 1952, change, especially change in terms of the modernization process, has been greatly accelerated. The attempts at rapid modernization within all phases and institutions of Egyptian life have as their goal the improvement of the quality of life for all Egyptians. To date, these attempts have only partially succeeded due to a number of external and internal reasons. It is hoped that the near future will bring greater success but the important element, as expressed in the content of this volume, is that modernization in Egypt represents planned change in order to bring Egypt into the modern era.

The primary purpose of this book is to share with colleagues and students outside Egypt the views, attitudes, and ideas presented by the different authors. A secondary purpose is to expose the breadth and scope that the impact of modernization process is having upon the institutions and culture of Egypt.

One small result of this book may be to increase, no matter how slight, human understanding of the difficulties facing a small country which is trying to improve the living conditions for all its people. Should it serve any of these ends, the project and the work of all participants, Egyptian and American, can be considered as worth the efforts expended in the preparation, development and completion of the seminars' task.

IMPRESSIONS AND CONCLUSIONS

By

Mahmoud Fahmy (Leader of the Study Group, 1972)[*]

Richard James (AACTE Representative)[**]

As noted in the introduction, the 1972 A.R.E. Seminar had four specific objectives. These objectives provided a practical framework for organizing the programme of lectures and visits and for promoting the accomplishment of individual assignments that were identified by members of the study team.

With regard to the first objective, providing participants with an opportunity to gain first hand experience with problems related to the process of modernization in the A.R.E., the activity was eminently successful. Included in the series of distinguished lectures were some of Egypt's top experts in education, economics, research, science and other professions. Participants had an opportunity to discuss with them various issues and concerns related to the emergence of Egypt as a modern industrial state. The study team visited the Aswan High Dam, the Helwan Iron and Steel Complex, the textile mills at Kafr El-Dawar, the Kima Fertilizer Factory and many other enterprises that are a part of the national modernization effort. These opportunities were provided for on-the-spot discussion of problems related to the work being done by these establishments. A complete list of the lectures and the visits appears in the appendix which is attached to this report.

It is important to note that some of the most important activities of the team do not all appear in the programme. Examples of some of the most impressive such activities are : the reception held for members of the team by the Governor of Aswan; the visit to the newspaper El-Ahram including the opportunity to chat with the editor Mohamed Hassanein Haykal; the audience with the Governor of Alexandria which included a chance to talk about the problems related to administring that Governorate; the boat ride on the Nile with members of the Luxor City Council.

(*) . Assistant Professor of Education, Wilkes College, Pennsylvania.

(**) Associate Director, AACTE.

With respect to the second objective, that of clarifying the interrelationships between educational planning and the modernization process in the A.R.E., the progress of the project was probably somewhat limited. In part, this can be attributed to the lack of knowledge of the group about the A.R.E. and its governmental structure. Most agree that planning in the Egyptian Government is characterized by a high degree of centralization. Vertical lines of authority are clear, but the degree to which there is horizontal coordination was not always easy for the group to discern due to shortage of time. This second objective might be the focus of a subsequent seminar involving educators with highly specialized knowledge in the area of planning and modernization. Other recommendations on this point are cited by the director of the project in the A.R.E. in the introduction.

The study team is still engaged in efforts to accomplish the third objective — that of refining and dissiminating the knowledge gained during their work in the A.R.E. They have summarized and commented on the programme of lectures, they are making and collecting items for audio-visual materials and they are preparing individual papers based on their work in the areas that they selected. The full impact of those efforts will become evident when the participants return to their home campus to share this experience with their colleagues and their students as well as with the 865 institutions in AACTE and the higher education community at large.

The study team has been engaged in continual efforts to accomplish the fourth specific objective. Numerous formal and informal contacts were made with educators of the A.R.E. Some of these experts provided valuable assistance to participants in the accomplishment of their individual assignments. Some were included in the list of lectures who spoke to the group. All of these contacts included numerous opportunities to exchange views and establish a basis for future contact. Egyptian educators showed a strong interest in the 1973 International Council on Education for Teaching (ICET) World Assembly which will convene in Nairobi, Kenya. That interest should be encouraged as a possible way to follow up on contacts developed during the seminar.

COMMENTS, OBSERVATIONS AND IMPRESSIONS

By

William Eagan (Leader of the Study Group, 1973) *

The most striking element in such an exposure as our seminar has had to a foreign culture are the people. We have been deeply impressed by the Egyptians' friendliness and keen sense of humor. Universally, wherever we have gone we have been met with those characteristics, as well as with a sincere attitude of warmth for the American. While the Egyptian disagrees with our government's policy in regard to the Middle East, he does not let that stand in his way of expressing a genuine affection for us personally.

First, because of the nature of our visit to Egypt, a seminar group studying under the auspices of Ain Shams University, we were given tours to, and in, places normally restricted from the regular tourist. Second, since the length of our stay was eight weeks we were able to see the Nile Valley from its mouth at the Mediterreanen to its uppermost Egyptian portion, Lake Nasser, at the border with Sudan.

In our tours we visited the various major historical sites which, while rewarding and awe inspiring, need no comment here. We also visited and were exposed to several cultural developments and activities. Again the wealth gained from these was largely personal which can only be shared on that level. What I would like to comment upon are those tours and visits that reflect the single most impressive development in Egypt today, the Aswan High Dam. Everywhere we went it was reflected somehow as the dominant factor in Egypt's future.

With the completion of the full complex of the Dam in 1975, Egypt hopes to use it as the lever by which she emerges as an advanced nation in the Twentieth Century. The impact is plainly noticeable wherever one goes. If one looks at social — cultural attitudes one sees and hears them in the process of change. The Egyptian realizes that the mere presence of the High Dam demands him to alter some of his traditional concepts so he can more fully benefit from it.

(*) Professor of History, Southern Colorado State College.

If one observes the industrial sector one now sees steel mills instead of just agricultural fields. There is electrical power being extended into areas where twenty-five years ago knowledge of electrical products, such as television, would have been as foreign as the moon prior to space travel. In the agrarian realm one travels into what was, twenty years ago, unreclaimable desert. Only today one does his traveling through thousands of acres of grapes, corn, alfalfa and other non-desert crops.

Economically, the High Dam has convinced the contemporary Egyptian that he and his country are not condemned to a permanent underdeveloped status as a people and a land fit only for agricultural pursuits. It has provided him with the encouragement to make the personal economic sacrifices so that his nation may become a modern, industrial, agricultural, educated, democratic state playing an equitable and responsible role in the world.

This is not to say that the change has been easy or sure. The Egyptian still has a long way to go in realizing his dreams. Total literacy, economic balance, population control, « the good life », healthfulness for all and the other elements the average American aspires toward, are still more aspiration than reality in contemporary Egyptian life. However, what we have seen, visited and partaken of in our eight weeks, convinced us that the Egyptian is making as conscious, sincere and dedicated effort to accomplish those for his fellowman as is being undertaken anywhere in the world.

THE UNIVERSITY OF AIN SHAMS

By

Ismail Ghanem *

On behalf of Ain Shams University, it gives me great pleasure to extend to all participants in this seminar my most hearty welcome. You have come a long way to visit our country and study the process of modernization in Egypt and its relationship to educational planning. I understand that you will not only discuss our educational, social, and economic problems as related to our cultural background, but will also have visits and interviews to enrich these discussions. I hope that the more you understand our problems and the efforts that are being made to solve them, the more you will appreciate our determination to build a modern state. You will probably discover that we have differences due to different backgrounds in our cultures. This does not mean that we do not have much in common. However, a stranger usually looks for differences, as a means of broadening his perspective on the world.

We at Ain Shams University believe that understanding and interaction, particularly among university professors, can help promote peace and friendliness among nations. This seminar is organized by Egyptian educators and university professors for you, our American guests and colleagues. After your eight-week study of Egypt, you will carry back home much in the way of information, impressions, and experiences. You will probably share these with your students, your colleagues, and with others who are interested in the outcome of your visit. I also understand that your sponsor, the American Association for Colleges of Teacher Education (AACTE), will disseminate the substance of your lectures about Egypt to its 900 member universities and colleges. This is indeed welcome as it will bring this seminar to many other people as well.

I thought that at this reception you might like to know something about the university which is acting as a host for your seminar. Ain Shams University is a young university compared to some other

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(*) President of Ain Shams University. A summary of his address given at the opening of the seminer.

Egyptian universities. It was established in 1950. Al Azhar University, the oldest university in Egypt, is one thousand years old. Cairo university was established in 1908 as a private university and became a state university in 1925. Then Alexandria University was established in 1942. Other state universities in Egypt are Assuit (1956), Mansoura (1972) and Tanta (1972). We also have the American University in Cairo (AUC) which is a private university.

Ain Shams University has a branch in Zagazig and in Shebin El-Kom. This branch is expected to become a seperate university soon. Assuit University also has branches in different governorates in Upper Egypt.

When our university was established in 1950 it was given the name « Ibrahim Pasha University » after the name of the son of Mohammed Ali, the founder of the ruling dynasty at that time. It was later thought that it would be more appropriate to give the new university a name that would be a permanent reminder of the ancient history of this country and a symbol of its long cultural traditions. Thus, upon the recommendation of the University Council, a law was passed changing the name to « The University of Ain Shams ».

Ain Shams (Shams meaning the sun) is the Arabic name given to a locality which was once known as « Un », or by the Greek name of Heliopolis, « The City of the Sun ». The religious importance of Un goes back to prehistoric times and it was there that sun-worship was said to have originated. A theological school was set up at Un where certain beliefs regarding the creation of the earth and cosmos were developed. These were destined to play an important part in the beliefs of the ancient Egyptians and in the organization of the official state religion.

With the union of Upper and Lower Egypt in 3200 B.C., Un's influence spread throughout Egypt. Its highly developed political and administrative institutions helped establish order and stability. Although the focus of later political history was elsewhere, Un remained a cultural center until the last days of the Pharaohs. This is indicated by the many events which took place in this locality as well as the references of the historians who came to this area from other parts of the world.

Egypt was the center of knowledge for centuries and men came to the Nile Valley to study writing, architecture, mathematics, medicine, astronomy, and philosophy. Ain Shams was always one of the most important centers of learning, and men came to that locality to study and to worship at the temple of « Ra » with its twin obelisks, of which one is still standing today.

The obelisk in our university emblem refers to one of the holy symbols of the sun, and the hawk on either side of the obelisk is but another sign of the holy sun.

Ain Shams University has nine faculties in Cairo : Arts, Law, Science, Medicine, Engineering, Commerce, Agriculture, Education, and the University College for Women. In Zagazig we have Agriculture, Commerce, and Veterinary Science plus a branch of the Faculty of Medicine and a branch of the Faculty of Education. In Shebin El-Kom we have also Agriculture and another branch of the Faculty of Education.

The total number of students in our university has risen from 7,530 in 1950/51 to 60,350 (of whom 22,080 are women) in 1972/73. The teaching staff in 1972/73 numbered almost 3,000 including more than one thousand graduate assistants. Thus we have all the advantages and disadvantages of the « big university ».

This is only a very brief introduction to our university. I am sure you will come to know it better as you meet with our faculty members and students.

While Ain Shams University is your sponsor, I have delegated Prof. Dr. Salah Kotb to be the host director of this seminar. As my immediate predecessor as President of Ain Shams University and one who has devoted a lifetime to Egyptian education at nearly all levels, I know that you will find him knowledgeable about many of the areas you have come to study and helpful in assisting you in all matters concerning your stay here. Through him the entire facilities of the University are at your disposal.

I would like to repeat that you are most welcome here, and I wish you and the seminar every success.

ON THE BRIDGING OF GAPS

By

M. Kamel Hussein *

It is customary nowadays to repeat the truism that, thanks to the ease and speed of communication and the spread of knowledge, the world is getting smaller and smaller. We can have fully documented first hand information about the Red Indians, the Aborigines of Australia, and Vatican Council II. The implication is that this will eventually lead to harmony and peace between men.

This has not been the case, gaps between peoples, institutions, ideologies and cultures are even wider and more numerous today than before. The problem of gaps has always existed, but it was never as important or as urgent as it is today. In ancient times gaps were taken for granted because they depended on the real superiority of one man, or a group of men, over others. Juluis Ceasar was so immensely superior to his legionaries that the gap between them was admitted and his authority was not disputed, perhaps not even discussed and certainly not resented.

The spread of education and the availability of knowledge seem to have had the paradoxical result of making gaps more difficult to accept. Not all differences constitute gaps. Differences that are temporary and those which exist between things that are in continuous flux are not true gaps. They become gaps when they tend to be lasting or when they exist between two fully-established and stable institutions. Defects in any one structure are sometimes called gaps such as those which exist in our knowledge or culture. These have to be filled and not bridged.

Gaps are of two kinds, some are narrow and deep such as those between the various faiths; others are wide and shallow such as those between the rich and the poor, very few are both wide and deep. Gaps exist in all walks of life. They exist even in individual psychology, the most obvious being that between a man's aspirations and his abilities. A man who does a job slightly better than his abilities soon becomes anxious, neurotic and generally unhappy, while he who does a job slightly less than his maximum competence becomes com-

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(*) Former President, Ain Shams University, Cairo.

fortable, relaxed and contented. This may be a great personal tragedy, all too common in our day and age. However, the most serious tragedy today is the existence of gaps between groups and institutions.

The forces acting on our societies are of two kinds, the centripetal which bring people together and the centrifugal which tend to separate them. Centripetal forces usually originate from self-interest. Belonging to a group makes one feel secure, from any but the more serious aggressions, and ensures one's being able to profit by the efforts of the group more than one would be able to obtain by individual exertions. The cohesion between members of any group depends on the attractions and repulsions existing within the group. These vary at different times and occasionally may cease all together. The most important centripetal force was, until quite recently, that of nationalism, every man being expected to put his country above everything else. Religion is also a strong centripetal force bringing together people of all shades. Philosophy taught that logic was the factor in bringing people of equal mental development together.

Nowadays ideologies seem to be potent centripetal forces of extreme importance. Up to the First World War it was axiomatic that nationalism was the supreme power of cohesion between compatriots. A revolution in this connection has already taken place. Dockworkers in the U.S.A. seem to understand the dockworkers in London more than they understand their employers. They were ready to support dockworkers in other nations even when this led to a loss of business and money to their employers, a very significant change indeed. This reshuffling of loyalities is gaining momentum and will probably change our social life beyond recognition. At first sight this seemed to be a step in the right direction, loyalities cutting across frontiers between nations. The fact is that this movement changed the vertical gaps between nations into more horizontal gaps between groups and classes. Thus it did not advance the cause of peace in the World.

Centrifugal forces are stronger and more effective leading to ever-widening gaps. Modern life enhances these centrifugal forces. Our life today is too big, too fast and too feverish. Bigness is in itself a means of increasing the gap between the big and the small. Big businesses drive small businesses out of existence, to the detrement of both. Big businesses are essentially amoral. Is the manager of General Motors right if he forgoes for the sake of scruples, a decision which would bring more profits to the share-holders ? Probably not. His obligation to the share-holders makes such a decision very serious even if it were morally reprehensible. I maintain that no man is big enough to be President of the United States of America even with the assistance of competent technicians. The last decision of « Yes » or « No » lies with him. No man can be aware of all the implications of so momentous a decision. Bigness seems to be the order of the day, which is not conducive to the health of nations.

We also live at far too fast a pace. Excessive speed is a potent centrifugal force tending to separate people still further. It was Aldous Huxley who remarked that speed is the only human pleasure not known to the ancients. Hence our addiction. We like speed for the physical exhilaration it induces. Yet it is certain that nobody is any better for crossing the Atlantic in six hours instead of nine. The picture of a businessman flying with his secretary and her typewriter in a supersonic plane, making important decisions and communicating orders by wireless would be comic if it were not so tragically expressive of a disastrous attitude towards life. Newspaper scoops result in the deterioration of journalism for they lead to raw opinions and hasty judgements. Our brains were not made to function well at excessive speed. We have no time to think, let alone to weigh the full implications of such big decisions. Every organ has an optimum size beyond which its functions are inevitablly impaired. No wonder many people in high positions soon become psychopaths.

I prefer the conceptions of gaps as an explanation of the ills of our modern life to that of conflict. We inherited the notion of conflict from thinkers of the Nineteenth Century. They saw conflict everywhere, whereas we are now more impressed by the harmony rather than the discord in nature.

Up to the First World War the prevailing notion was derived from a false interpretation of Darwin. People thought that the struggle for existence and survival of the fittest meant that members of the same species fought each other so the fittest might survive. Darwin said nothing of the sort. All he made reference to was strug-struggle against the environment. It is certainly childish to imagine that one dog has to fight another dog so that a better one may evolve. That notion was a really dangerous one and resulted in the catastrophies all can see. The same concept was entertained by Freud who was supposed to attribute all our ills to a supposed conflict between the conscious and the subconscious, a sort of boxing match in which the subconscious always won. But it was Karl Marx who raised the idea of conflict to the level of a law of nature.

For all its world-wide spread and fervent admiration of its adherents, Marxism may be positively true in the field of economics, but philosophically it offered no explanation and prescribed no cure except violence. Its emphasis on conflict being the main cause of trouble cannot lead to harmony between classes. Marxists claim that they do not preach conflict, they only state a fact. They forget that they made conflict a creed with no appreciable success.

The notion of our ills being the result of gaps which could be bridged may be a better explanation, offering better means for their correction. The laborer today is not moved by the fact that he is exploited or that he does not receive the full value for his work. He is motivated in his aggressive attitude by the fact that there is a wide gap between him and his employer. As a matter of fact he lives better than Louis XIV, except for the number of women the latter made friends with. The laborer does not care much for the amenities he lacks if it were not for his envious attitude toward those who have a better chance in life.

Higher wages and better conditions of life are of course necessary and just, but they will not bring any peace or harmony in the world of labor. Two things are essential, employers should be more charitable in giving up some of their rights and laborers need not insist on equality with their superiors. This gap in particular can not be filled, it has to be bridged by advances on both sides. The spirit of being contented is looked upon in these days as a sign of weakness. Competition is supposed to be the greatest motive behind progress. This is certainly wrong. The object of any man should be to develop his abilities to their maximum. To keep up with the Jones' is a classic joke but we are doing worse, we are trying to be superior to the Jones'.

Sailors of old had plenty of food but they lacked fresh fruits and thus became afflicted with scurvy. So is it with laborers today. We can give them all the wages they demand and all the amenities they desire but will it make them any happier ? They lack the spirit of contentment and this shortage has to be remedied. They should have the element of faith before becoming in any way happier than they are now. Privileged people are responsible for much of this envy by setting up as the final ideals of life, the possession of yachts and the enjoyment of champagne dinners. Thus, it can be maintained, that affluent socities are not necessarily rich ones. The word affluence describes perfectly the soulessness of plenty and reduces to a great extent the influences of moral considerations.

Our knowledge of culture is vitiated by wrong classification, a great source of error in any study and a serious impediment to the growth of science. We all know that our knowledge of nature was arrested for almost two thousand years by the wrong classification of elements into earth, water, fire and air. Culture is usually classified according to a country of origin. We speak of French culture and German culture which are distinctive enough but the differences between them are not fundamental and can not serve as a basis for proper classification which should be based on psychological rather than national qualities. Classifying cultures as either Eastern or Western is still worse, for it has no significance. Kipling's famous line « east is east and west is west and ne'er the twain shall meet » may be good poetry and doubtful politics, but it is certainly bad philosophy.

The history of culture runs along similar lines starting in most primitive people from very nearly the same point. Then they develop according to certain general principles. This is a fascinating study which, unfortunately we can not develop here.

Some cultures develop up to a certain stage and then, for some reason known or unknown, their growths are arrested while some other cultures continue to grow. Thus, differences between cultures seem to be a question of their growth. They all start hesitantly with a crude style, a stage which in many respects is more genuine and expressive than the florid style of more advanced and sophisticated stages. When the style becomes more refined a culture develops into its classic stage. This classicism soon loses its creative power which leads to the arrest of growth. Cultures do not die unless their people cease to exist as entities, e.g., happened with the Incas. In other cases cultures simply hibernate leading a sort of suspended animation, keeping up some of their old achievements without any new significant creations. When they begin to be revived, often with a jolt, under the influence of internal and external causes, their revival follows almost identical lines.

At the present time we are witnessing the revival of almost all primitive cultures in an attempt not only to develop their own vitality, but with the imperative object of keeping pace with the advanced cultures of today. In West Africa people chose to take up the culture of the West in its totality starting from where the West ended. The best example of this is what President Sengor has done. He showed that talented Africans can write French poetry as good as the French, thus proving that there is no truth in the myth of the inherent inferiority of primitive races. He definitely succeeded in this. In the same way Nigerian authors are writing excellent drama in perfect English depicting their own life style and its problems. In this way they solved the problem of their cultural renaissance. But is this the right way to create a new authentic Senegalese or Nigerian culture.

The result would certainly be to create a culture only for the elite, which is not the best way to create a national culture. With the more developed cultures such as the Arabic, Indian and Chinese, the problem is both simpler and more difficult; simpler because the distance between the point at which these cultures were arrested is not so far from the cultures of today; more difficult because it is impossible to disregard completely their valuable and deep rooted aspects.

At one time, up until the Fifteenth Century, the Arabic culture was the most highly developed in the World. Then it hibernated until early in the Nineteenth Century when the new revival began. A good many thinkers, authors, and artists began to emulate their Western colleagues. There is hardly a school of thought which did not have representatives among us. There were and still are many Egyptian authors who have adopted impressionism, symbolism, existentialism and even the theatre of the absurd. They thought they were taking a short-cut by which they hoped to arrive at the same degree of development as the West.

Contemporarily another movement took place in which the old culture was revived in its old form and this is still being followed with vigor. At the same time attempts are being made to give the old culture a modern form, more compatible with the modern evolution of culture, a difficult but not impossible task. Personally I am in favor of developing our culture naturally without any deliberate planning of its future. Very probably its natural development will be toward Western civilization. We should profit by the past experience of trial and error which the West went through during the four centuries since the Renaissance : we should try to do this in a much shorter time than they did, yet without missing any of the stages of development.

Be that as it may, we can safely state that we have already arrived at a stage which allows us to share in the solution of the universal problem of education. Education is, of course, the only means of ensuring continuity in culture. Education in general, and higher education in particular, is actually passing through a crisis. There was a time when education was fairly simple. It formed the link between past, present and future generations. Educationalists were on firm ground; the past was not so very different from the present and there was every reason to believe that the future would not be radically different from the present. Men were considered cultured when they knew something about the classics and philosophy with a knowledge of the masterpieces of literature. On the strength of such education, men were able to deal effectively with the problems of their lives without much technical knowledge. This sort of education helped to develop a refined and sophisticated type of common sense which seemed to be all that they needed.

The development of technology made such education quite inadequate. A man has to be armed with a complete and detailed knowledge about his job. No amount of general culture can prepare a man to pilot an airplane. To be an expert pilot demands the expending of an amount of energy and time which leaves little for acquiring knowledge of the general culture. Thus these experts, by being mere technicians, are deprived of any broad outlook on life. This is not only detremental to their general development, but it also interferes with their ability to keep abreast of the progress of their own speciality.

The crisis of education today is how to make cultured people good technicians and how to give technicians a good understanding of general culture. One solution is that of the well-known theory of the two cultures, by which humanists are given a year at least of intense scientific study and science students are given a year or so of real humanistic education. In practice this appears to be difficult to achieve. There seems to be a divergence of aptitudes between the humanists and scientists. This change of gear seems too difficult except for the very talented. Probably this is not the solution of the dilemma facing the world of education at present.

The solution is to try to make a culture of science. I believe that this is not impossible. Science meaning a technique of thinking, has the advantage of being universal and of being ever growing and by its very nature accumulative, qualities which can not be claimed for humanism. This is the distinguishing feature between science and technology. Technology of the atom produced the atomic bomb, but science of the atom has changed all our knowledge about nature. Science teaches correct observation, correct analysis and correct synthesis, establishing laws which can be applied to all branches of knowledge. This is a very ambitious hypothesis which only time can prove or refute.

Science has already shown that the various disciplines are not alien to each other and are certainly not antagonistic. They form a harmonious whole from the simplest to the most complex, higher laws being essentially extrapoiations of lower ones. Science is the only discipline on which all men can agree, a good starting point for agreeing on other things. Thus the claim that the habit of mutual agreement is best developed by training in science. In this way harmony can be developed between seemingly irreconcilable attitudes. Most men are reasonable in the etymological sense of the word, i.e., they have reasons for their actions. Mankind can all agree on the truth of a scientific theory, but not all can agree on the beauty of a specific painting or a particular poem. By education cultures, properly understood, can be brought closer together. In this way the gaps between them will be effectively bridged.

I have great hopes that scientific education in its highest sense will lead to peace and harmony. For one thing science will cure us of wrong techniques of thinking. We are in the habit of thinking in opposites, things being either right or wrong, true or false, hot or cold. Science teaches that these are not opposites, rather that they are manifestations of continuous processes and that there is no need to consider them as opposites or antagonists.

Take a question of a thing being hot or cold. Philosophers consider this as a clear example of opposites which can not exist in one thing at the same time. The fact is that the temperature of an object is a function of molecular movement from absolute zero to the highest known temperature and that hotness and coldness only refer to our body temperature which is quite accidental.

Again old chemists thought that a thing is either an acid or an alkaline. Now we know that acidity and alkalinity are functions of hydrogen ion concentration. Once we master this technique of thinking most things usually considered as opposites will no longer be so. The physical and metaphysical, the material and the spiritual will no longer be considered as antagonstic. It is hoped that this harmony of thinking will result in a harmony of behavior.

This attitude of mind which sees continuity in all things is entirely the result of science. Even light and darkness should not be considered as opposites for light is only that segment of electro-magnetic waves to which our eyes are sensitive. Even black objects can emit rays similar to light waves, but with a different frequency. Science also teaches that the various disciplines run parallel to each other without any opposition. Physics, for example, is one continuous discipline from the atom. Chemistry is an excellent example of continuity starting from the simplest compounds to the most complex ones which are the basis of life. Again science teaches the hierarchy of laws, each one acting at a certain level of phenomena, without the higher laws being in any way contrary to lower ones. I have elsewhere tried to prove this theory in detail but here I only want to emphasize that science is a unifying factor.

But where do human values come into this system ? We talk about values without really believing in them. This reminds me of T.E. Lawrence describing a padre preaching to soldiers as the blind preaching to the deaf with no result at all. Talking about values will not help much in making them an effective force in shaping man's behavior.

Take violence which is a very complex subject indeed. The most common cause of violence is a previous violence. Take for example the disgusting crime of kidnapping. This is sometimes done to obtain release of political prisoners. But what had the Government been doing ? They had in fact first kidnapped the political prisoners without trial. The fact that this is done in the open with the legal force of the police does not change the nature of the crime. Violence can not be prevented by counter-violence. This has always failed, in fact it leads to more violence, a vicious circle which seems to have no end. In this situation there is a general atmosphere favorable to violence. A general atmosphere of violence exists before and during wars. This makes enquiry into war guilt futile. To avoid violence we have to bridge the gaps which are all too often the main cause of wars. It is a council of despair to think that violence is a natural phenomena and that gaps will always exist.

LIVING IN EGYPT

By

Carl V. Schieren, Jr. *

Ancient Egypt has been a cradle of human civilization and a crossroads of mankind for over five thousand years. You will see the remains of these civilizations that have been preserved in so many ways, not only in the remarkable treasures of antiquities in Cairo and Luxor, but also in the practices and consciousness of modern Egyptians.

It is appropriate that Americans should come to the country that has given, and is still giving, so much to world civilization. Last year Americans represented the largest group of non-Arab nationals to come to Egypt. In spite of that Egypt remains in the United States one of the least well-understood countries in the world.

You have come to learn about Egypt. I shall talk to you about « Living in Egypt ». Hopefully we all learn from living, and in what follows I shall give you some information, helpful hints, and opinions which may give you a perspective from which you can enjoy more, and understand better, the people and events that you will encounter during your stay.

The cultural wealth of Cairo is at the disposal of all who live or visit here. The legacy of ancient Egypt hardly needs publicity. However, through the ages, after the decline of ancient Egypt down to the present day, this country and city have been a center of culture and cultural diffusion.

The Muslim wave of conquest and immigration, beginning in the Seventh Century, made Cairo the chief commercial and cultural center in the Muslim world. One of the chief reasons for the latter was the Al-Azhar, an institution that is both Mosque and University, which has brought students from Africa and the Middle East to Cairo for 1,000 years. At the time of the first confernce of nonaligned nations, held in Bandung in 1955, the Egyptian revolution was less than three years old. President Nasser was not as widely known as he was to become after the Suez War in 1956. At the last minute he decided

(*) The American university in Cairo.

that the Sheikh of the Al-Azhar should go along as a member of his delegation. When the delegation arrived, the President was greeted with appropriate formality. However, there was clearly as much popular interest in meeting the Sheikh of the Al-Azhar, as there was in meeting the President himself. The event illustrated, dramatically, to President Nasser the quiet links that Egypt has had throughout the world through the Al-Azhar. Therefore President Nasser included the Sheikh El-Azhar in subsequent high-level delegations in the region.

Cairo is the only city in the Muslim world which has had a continuous construction of Islamic schools, hospitals and mosques since the Seventh Century. I hope that you will have time to visit them, since they bring to you in a way that a talk cannot what this city was like, the merchants, the commercial activity, the religious life, during the era, when the city was cut off from the West.

Napoleon conquered Egypt in a few days in 1798 and, in so doing, reestablished European contact with the country. The nature of this contact from then almost to the present-day was brutal, and intense, and it helps explain the way Egyptians view the West today. The 150 years after Napoleon witnessed waves of immigration which brought Greeks, Italians, French, British plus other nationalities into contact with the Muslim majority and the Coptic Christian minority, making this country as diverse as any in the world. Since the 1952 Revolution the European minorities have dwindled, the country has become more consciously « Arabic », and control has shifted clearly into the hands of people who speak Arabic, though whose roots are Egyptian. For the first time in Egyptian history, children of farmers and laborers are playing a role in the economic, social and political development of the nation. The interweaving of ancient culture, a proud Islamic heritage, intensive contact with Europe and a socialist revolution provide the visitor, or foreign resident, in Egypt an opportunity for exposure to a vibrant, contemporary, cultural, artistic, and social life. In Cairo one must always regret the cultural interests he has not had time to pursue.

For all of us here in education, Cairo is where the action is in this part of the world. Egypt has a higher per-capita university population than the United Kingdom and many other countries in the Western world. While there are problems associated with this magnitude of educational committment, it is nonetheless an index of this society's belief in education, its committment to education, and the influence that this country has throughout the region in educational matters. The University of Kuwait is virtually an Egyptian university established along the lines of Cairo University. Lebanese Arab University in Beirut was established and is operated to this day under a special agreement with the University of Alexandria. The University of Libya was established with the same draft laws and internal regulations as Cairo University. All the above are largely staffed by Egyptian professors. Similar examples may be given for the Sudan and Saudi Arabia. The Egyptian example is nearly as strong throughout the region in primary and secondary education as well. This applies to educational organization, curriculum, and especially to teaching staff. Much of the inspiration and direction in primary and secondary education comes from the Ain Shams University Faculty of Education, the oldest faculty of education in Egypt.

Ancient Egyptians worshipped the god of the sun, and many visitors still come to Egypt for its almost unceasing supply of sunshine. It probably does not rain more than a dozen times per-year in Cairo. There is little humidity in Cairo and less in upper Egypt, though Mediterranean breezes bring a little more rain, much more humidity and cooler temperatures to Alexandria. Summer maximum temperature average about 95° in Cairo and 112° in Aswan, but Egyptians have a solution for the hot afternoons. They go inside thick-walled buildings from about two to six p.m. and come out for some of the loveliest evenings found anywhere. They get the most out of it by waiting until ten or eleven in the evening to have dinner. On the other hand the winter cold surprises most foreigners. Temperatures sink into the high 30's and sweaters and heavy clothing are absolutely necessary. The Cairo resident can note with self-satisfaction the plane loads of Europeans, organized under doctors' supervision, who come to Cairo to relieve their aches and pains by brief exposures to the very sun and air that the native enjoys all year round.

Would any of you, women included, believe that you can walk down any street in Cairo, a city of 7 million persons, alone at any time of the day or night without fear of getting robbed, raped, or mugged ? That should not be an excuse to walk down a crowded street with your wallet hanging halfway out of your pocket; temptation is great everywhere. But the remarkable fact is that this is a country with little crime, especially crimes of violence. Similarly, despite a famed history of hashish use, hallucinogenics and other sorts of drugs are nearly non-existent in contemporary Egypt. According to a recent report I have seen, the government's efforts to outlaw hashish and other narcotics have been largely successful. Your professor of sociology might do well to inquire about crime and criminology in Egypt. He may find that we Americans could learn some things about society and social organization from the Egyptians.

Perhaps one of the most rewarding and remarkable aspects about Egypt for me, as an American, is the emphasis that Egyptians place upon people and human relations. There is a tedency to think less about issues and problems in the abstract. With people there is a tedency to say, « I know you. You have come to my home. You are someone special to me, and regardless of what else happens in the world, politically, economically, socially, that's the thing that comes first ». In discussion, more attention may be given to the way in which something is said — the degree of respect and understanding given the other person — than to the substance itself. All this is something I see in sharp contrast to the life style that has developed in the United States in the last half of the Twentieth Century. Furthermore, Egyptians have a real sense of hospitality toward foreigners in general and toward Americans in particular. To most Americans this is unexpected and quite overwhelming. I hope you will have an opportunity to get to know some of the speakers and other participants in this program on more than simply an « I'm coming to give you a talk » basis. To Americans who come to Egypt and to those who live in Egypt the most important and attractive part of their experience here is contact with Egyptian society and not with the tourist gloss and hotel life, not to mention the hotel food that you are experiencing. The most memorable things will be the contacts you will have with Egyptian people. The climate, the cultural richness, the absence of crime, and most of all the Egyptians themselves are only some of the most pleasant aspects I have found about life in Cairo and Egypt. You will find much more.

Even though there is much to be experienced and much to be enjoyed in Egypt, we need to be receptive to the learning and the joy. Whenever anyone leaves the environment with which he is familiar he usually feels a bit strange until he gets used to his new surroundings. Within the United States, wherever we go the change is never great. Most of us speak English. We share a sense of common history. We drive the same cars and eat many of the same foods. Our transportation, communications and mass media systems help us to share a more common identity today than perhaps ever before in Amercian history. When we go abroad as a casual tourist we rarely leave a familiar enviroament for long. A whole network of hotels, campgrounds, and service people speak our language, anticipate and cater to our needs. We are usually reinforced by countrymen with whom we travel. We observe foreign lands, but rarely participate in the culture of the land we visit.

When we go abroad under other circumstances, perhaps as a student or a resident, we are more likely to participate in a foreign culture. At this point we may encounter several levels of unfamiliarity. First, we find that the simple mechanics of daily living using the telephone, getting around, shopping, cleaning, or fixing the sink become major problems and a source of worry. Second, we may find the behavior of nationals incomprehensible, whether this is in regard to local driving practices, the punctuality of a colleague or the behavior of a servant. This normal and predictable sense of isolation from local culture which we begin to feel has been given the term, « culture shock ». While this describes a normal and predictable condition, with the right frame of mind you can limit its intensity and duration and make the learning process an enjoyable one.

Americans in Egypt often ask, « Why can't these people speak English »? A fair question if you come from a country where we have spoken English since the time our nation was founded. People say time and time again that the most difficult thing in Cairo, particularly if they are not under the sponsorship of an organization such as Ain Shams University, is not being able to get along Arabic. It's not being able to speak the language. It's not being able to read the signs. You cannot even tell what street you are on, except downtown where some of the streets have signs in both Arabic and English script. Your reaction to Arabic is a totally normal one. But there are ways you can get around your frustration. You can learn the numbers, from one to ten or from one to fifty. It's very easy. Ask someone to write them down for you. You do not need to be able to pronounce them. If you can that's fine, but it's stage two. My wife has gotten that far, and it makes her feel very good. She can walk out into the market, she can see the posted prices, she can see the bus number for some particular destination and can say, « That's the bus I want to take to get to such and such ». That helps one to feel much more at home. I recommend your taking a bus. Some Egyptians would not because buses are crowded. But if you want to get out among the people and relieve some of the sense of isolation that you have between yourself and the masses around you, it's a very good prescription. You could also take a bus out to the Pyramids in mid-morning. It is a lovely ride. Again the important thing is to feel that you are doing something on your own that says, « This is me, I'm doing it in this society, and nobody back home would believe it if I told them about it ». Communications also present a problem in Arabic. Hotel people may be helpful. But you really should not feel frustrated about not knowing it. If you can pick up some phrases, such as « Shukran » which means « Thank you » or « Ahlan wa sahlan » which means « hello » or « welcome », these might make you feel more at home.

Another thing that bothers people quite often is that the standard of cleanliness is not what it is back in Denver or San Fransisco, to take two of America's best examples. If you were to take other examples of cities that I know in the States, then I do not think that the comparison would be so unflattering to Cairo. In Cairo you notice that you are in the Nile Valley, in a lowland, and that to the West for thousands of miles and to the East for many miles as well you have nothing but desert. The desert winds, almost no matter which direction they are blowing, blow dust over the city, coating the city with the same color. It means that when you see an Egyptian house with brilliantly painted red shutters, you are witnessing one Egyptian's self-expression and determination to overcome the elements, to create for himself his own environment. Cairo dust is clean compared to the black soot that coats American cities such as New York. Nonetheless it is simply a fact that many Egyptians just do not think that cleanliness is all that important. We in America have elevated it to a very high level. Egypt and other countries in the world, even those that do not have a dust problem, will say it is not worth the effort needed to maintain the level of cleanliness that one has in the States. This is something that one accepts, one tries to understand, and perhaps one day the Americans or the Egyptians may change their attitudes about the subject.

As for food, my own feeling is that European, including American, food served in Egyptian restaurants is generally poor; that served in homes can be excellent. You can get good quality if you eat out at, say for example the Sheraton Restaurant, but there it is priced for the tourist market, and the number of Egyptians frequenting it will be small. You will find that the best food is local food made from local materials. In Egypt some of the base foods are *fool*, which is a flat bean, and *taamiya*, which is ground up grean beans deep fat fried. Both of these are available in many combinations. Another base food is *kushary*, made of macaroni, spaghetti and rice with lentils and onions on top with a sauce. You can buy an entire meal of any of these for five *piastres.* You may not want to make these cheap dishes your staple diet, but you ought to try them. You will also probably like them. When you do, go with an Egyptian so that you are sure of patronizing a clean place. Other foods are grilled pigeons, a real delicacy, grilled fish from the Nile or Mediterranean, and grilled shrimp, the largest shrimps you have ever seen. *Kebab,* lamb cooked on a skewer, is also a very popular dish, but you may be able to request that the chef give you lean pieces. Fresh fruit and vegetables are the best I've had anywhere in the world. While American hybrid varieties look great they do not have the taste of the Egyptian ones.

Egypt is a Muslim country in which alcohol is available as I am sure you have found to your great pleasure. Perhaps you have tried Stella beer, or Egyptian *zibib,* or rum, to mention some excellent examples. There are also a number of non-alcoholic herb drinks you can try. There is *karkaday,* made from a dried flower brought up from the Sudan; there is *yansoun,* an anise flavored tea that is often given to babies for its medicinal properties, but which I sometimes have in the morning because I am not a coffee addict; there is *tamarhindi* made from the root of the tamarind plant. If you try some of these foods and drinks you will develop favorities and may feel more at home.

At the American University in Cairo each year a number of foreign faculty members come in on a two-year contract basis to teach at the University. They may live in Cairo itself or they may choose to live in the suburb of Maadi. Maadi is lovely and it appears very American. It has spacious villas with gardens, tree-shaded streets, a club with a large number of American members in it. Though Egyptians are in the majority, there are enough Americans there to constitute a community with many varied activities. Or one can choose to live in Cairo, which as you know is noisy, active, and all the things you would expect of a big city. As soon as you see it you know that you have never lived in a city like it before. One would expect that the people who come to Egypt and live in Cairo would have greater difficulty getting adjusted than those who live in Maadi. But this is not the case. I think this has less to do with Maadi itself than with the expectations of those who move there. They may be misled by the appearance of Maadi to expect it to be very much like home. And then when they find out that they can not understand their cook, or that things do not come on time, or they can not get the things they want, their expectations are let down and they may blame

Egypt. In Cairo, on the other hand, one knows that one is in a very different place. One is prepared for the unexpected. The same applies to food too. When you order a hamburger or a steak or an *entrecote*, and you expect it to be like the steak you have back home, you may be let down. It's the same name, it may be the same piece of meat, it may be done the same way, but it is not the same. If you are prepared to accept Maadi and your steak as different from what you would expect in the States, then you will enjoy them both, as many Americans and Egyptians do.

When you come into a foreign country where you do not know the customs, you do not know the prices, you do not know the traditions, somebody is going to make a little bit of extramoney from you. You come from a society where, whether you like it or not, you are among the richest people in Egypt today. We do not need to go around throwing money away, but when it comes to traditions that Egyptians themselves follow, Americans ought to be able to do just as well and maybe even be slightly more generous. When it comes to tipping, I know more Americans who get in fights with the taxi driver, because the taxi driver expected a two *piastre tip.* The taxi meter read eighteen *piastres;* the American gave the driver twenty and sat there waiting to get his two *piastres* back. These are the cheapest taxis you will find anywhere in the world. And this poor guy, the taxi driver, probably has two jobs. Many do simply to make ends meet. If he gets two or three extra *piastres* do not begrudge him; it really does not make any difference to you. It does make a big difference in the way in which you come on to others in an interpersonal situation.

In a restaurant, ten percent is usually added to the bill. You are not required to leave anything additional. Some Egyptians do. Some do not. I am inclined to leave an additional ten percent. That means they may get twenty percent. If it's a big bill in an expensive restaurant and the bill is something like seven pounds, or ten pounds, I might not leave a whole pound. On the other hand if I'm in a restaurant where I'm paying a pound, I've no qualm about leaving ten *piastres.*

If you are trying to hail a cab and then some boy runs up with great fanfare, hails the cab that was already heading for you and opens the door for you, this fellow is an « operator » and is certainly not worth anything more than two *piastres,* if that much.

The American supermarket dream has not yet arrived here. You can not walk down the street and say to yourself, « I'm going to get a can of coffee, some milk, sugar, an immersible heater, some fruit and napkins to bring back to my room ». You can not get everything in one place. This is not a consumer oriented society. It is a social oriented society. The whole thrust of the Egyptian government, since the 1952 revolution, has been to improve the level of social welfare in Egypt. The consumer orientation of pre-1952 Egypt is something which the government has tried to limit. For a country that has the limited resources that Egypt has relative to population, this seems to make sense.

In any centrally planned economy it is hard to plan a rational distribution of resources and goods. Nonetheless Egyptians are well fed and reasonably well clothed. For those of you who have had experiences in India, you know what real poverty and real famine is like. It does not exist here in Egypt and one of the reasons for it is that they simply have not given in to our laissez-faire, incentive orientation through high salaries and consumer goods. They have rationed resources. Nonetheless, Egypt is remarkably self-sufficient and it is astonishing to find just how many consumer items, from Corn Flakes, glycerin soap, and a good rum, to automobiles, refrigerators and bidets, are made locally, in excellent quality and are avilable. So, if you want to buy something, ask your Egyptian colleagues, and I am sure they will do their best to take you to a place where you can purchase what you need, if it is available. You will enjoy going into some of these little places.

Egypt is in a state of war. Regardless of what we have said before, we can not forget this fact. Furthermore, I think that any objective analysis of why Egypt is at war and why Egypt has remained at war must conclude that this has been in part because of continued American support to Isreal. Now there are reasons why America has provided support, and this is not the forum to go into any of this. But it is a fact that the U.S. is the main backer of the state of Israel and Egypt feels that if it were not for continued American support the situation here could have been resolved. We as Americans are coming from an enemy state. In political speeches the two countries, America and Israel, are put together so that Egyptians feel that they are fighting not the latter, but both countries. Nonetheless Americans do not feel much of this in their personal relations with people. They will feel it when they read the papers and from time to time when they are given a talk by Egyptian officials. All foreigners in Egypt as well as Egyptians suffer from this state of war. For foreigners, there are restrictions. We cannot travel outside of Cairo, Alexandria, outside of Luxor or Aswan, the sole exceptions being the train from Alexandria to Aswan and the agricultural road connecting Cairo and Alexandria. You may get special permission to visit other areas, such as some of the newly reclaimed lands. We cannot go out to the countryside or to the Red Sea.

There are restrictions on taking pictures, apparantly for military reasons. You are not supposed to take pictures of bridges, of military bases, of major strategic buildings. Most of these have signs in front of them that say « No Photo ». Sometimes the signs are not there, and you are supposed to know anyway. Some policeman might come running up, unable to speak a word of English and you might get in trouble. That's a function of the current situation. If you are with people from the University, they will know what you can take pictures of and what not. Aside from military photographs, you should also exercise caution in taking pictures of crowded, poor areas. Those of you who have been abroad before will understand. Egypt is trying very hard to modernize. It's not easy. Part of the battle is simply creating a mentality that, « If we believe enough that we are modern and progressive, then we will be. And if the foreigners come in and remind us of our shortcomings and of the things that we have not been able to achieve, and if these are the things which the foreigners seem most interested in recording and photographing, it makes us uncomfortable ». None the less, if you are interested in materials for social studies in schools, then somehow you have got to get around the restrictions, at least to present the obstacles and traditions that impede change. You will have to work fairly closely with Dr. Kotb on this and I think you will find him, as he is in so many things, extremely wise and as helpful as anyone can be.

Another thing that comes to mind is « time ». « Why can't these people », says the man who is in culture shock, « be like us Americans and do everything on time » ? Well, once again time is not really that important. Time is much more important in Egypt now than it was ten years ago, and it would be very interesting to do a study comparing attitudes toward time at some point in the past and Egyptian attitudes today. It also means much more here than it does in countries in the surrounding region. The Vice President of our University recently spent two years on leave in the Southern Sudan working for the International Labor Organization, and he came back saying, « I can't believe the pace of activity here in Cairo. Everything is going so fast; everything is on time, and in Sudan nothing ever works like this ». Well, it is really a case of « where 'ya been and where 'ya goin », since our time sense is very relative. The whole question of cultural attitude toward time might be a focus on when you are talking to teachers and students in the States. Is the American one really the « best » ?

The foregoing hints about culture shock should make you realize that getting used to Cairo can be as much fun as it is work. You can cope with the everyday affairs of living, even though you can not speak Arabic and may never have been outside Denver.

However, getting along with the business of living is just a part of why you came here. You came with a curiosity about Egypt and a desire to learn about this society and country. Obviously in such a short talk one cannot cover many things in much depth or detail. If what I have discussed so far has been informal and impressionistic, at this point I would like to go even further out on a limb and beg the understanding of Egyptians who may hear or read these words, which will present simple ideas that by their very scope cannot apply to all people or all situations in Egypt. Nonetheless, I should like to try to give you a sense of perspective for some of the public activities and private experiences you will encounter during your stay. I would like to discuss what I might, somewhat presumptiously perhaps, refer to as three « keys to understanding » of contemporary Egypt : population, the strength of traditional attitudes, and Egypt's attitudes toward the West and toward Americans.

There can be no understanding of modern Egypt without an understanding of the magnitude of population pressure here. Egypt has a population of 35 million growing at the rapid rate of 2.6% each year. Cairo, with a population of seven million, is the largest city in Africa. Alexandria, with a population of two million, is the second largest city in Africa. Only three percent of the country's total area, or seven million acres, are arable. The rest is desert. With over 1,000 people per-square kilometer or 2500 per-square mile of arable land, Egypt is the most densely populated country in the world. This relationship between population and useable resources poses perhaps the greatest long-term constraint of any upon Egypt's development efforts.

Traditionally this has been an agricultural country, and Egyptian land is among the most productive in the world. In most crops Egyptian productivity per-acre is considerably higher than in the United States for each cropping and nearly all land is cropped three times per-year and sometimes four. Egyptian agriculture has benefited from excellent research, training, and applications of technology in key areas, particularly in irrigation. But the fields are usually cultivated by hand or oxen, and in the cotton season the fields are scoured *repeatedly by groups of farmers' children* who gently and methodically remove cotton worms from each individual plant. It is the massive inputs of manpower that give Egyptian land its productive edge over American land. Although the rural population continues to grow, Egyptian authorities have known that the countryside cannot absorb additional manpower in agriculture.

The government has been trying to make new land for farmers through an ambitious program of land reclamation and agrarian reform. The Aswan Dam, the most significant engineering accomplishment in the history of the Nile Valley, has increased the arable land available in Egypt by one-seventh. However, during the period of dam construction, the Egyptian population also grew by nearly the same amount.

An obvious solution is urban migration, and hence the phenomenal growth figures for Cairo and Alexandria, not to mention other major Egyptian cities as well. The urban growth has been accelerated since 1967 when the cities of Suez, Port Said, and Ismaliyya were bombed and their populations evacuated to the delta cities, including Cairo.

Since the population problem emerges in so many aspects of Egyptian contemporary life, active and ambitious efforts are being made in the field of family planning. These efforts by governmental and private agencies have largely been in the hands of competent medical personnel, and from the point of view of technology, Egyptian efforts are extremely advanced. However, the major obstacle faced by the family planning program has been the continued strength of traditional attitudes which make most couples and particularly women unwilling to limit the size of their families.

This is perhaps a useful point of transition to the second subject I wanted to discuss with you, which was the strength of traditional attitudes in modern Egypt. Traditional attitudes are not only at the root of the population problem, but many modernizing government officials wh[illegible]y that they are the primary obstacle to development in Egypt.

There are traditional attitudes with respect to authority, social status, and occupation. In a working situation, whether in a government ministry, a farm, a university classroom, or a machine shop, there is a much greater degree of fear of and deference to authority than we know in the United States. This restricts initiative and creativity, on the part of nearly all but those who are in the position of chief responsibility. Though it is no longer cringing and fearful, as it was often before the Revolution, there is still deference and respect paid to people of importance and social standing. This includes most foreigners, who sometimes are unaware that this deference carries with it an expected mode of behavior, such as appropriate or modest attire, politeness and kindness in dealing with others, and warmth, but not overfamiliarity with those of « lower » standing. With respect to occupations, certain ones, such as barbers, butchers, and mechanics are of low status but frequently well-paying, while others such as clerks, researchers, and teachers might have higher status, but pay poorly.

I cannot end this list without mentioning a « traditional attitude » that may be more properly described as a national character trait. This is the sense of humor that one encounters among Egyptians. More than in any country I have ever visited one sees people smiling and laughing frequently in the streets. One finds that Egyptians have a seemingly inexhaustible ability to laugh, be it at others, at themselves, or at their own leaders, regardless of who they may be. While some officials may deplore the lack of purpose shown by such attitudes, it suggests a refreshingly relaxed view of the world that will probably ensure that there will be an Egypt for the next 5,000 years after many other peoples have vanished from the face of the earth. If you get into a tense or confusing situation in Egypt, there is no better way to break the ice than by some comment as to how ridiculous you or the situation is.

The last point I would like to mention is the relationship between Egypt and the West. This is always a puzzle to many foreigners, and is particularly so with respect to Americans, who, as we have discussed before, are coming from what is seen as an enemy country. What I would like to say is neither profound nor any special secret, but it may be helpful background information to help you understand how Westerners and Americans are viewed and received here.

The roots of the issue go all the way back to Napoleon's conquest of Egypt in 1798. In two days he conquered a people that had thought for nearly 1,000 years they represented the height of human achievement. While the scientific, linguistic, and historical contributions of medieval Islamic scholars, not to mention the power and artistry of Muslim merchants and ruler's courts, were glorious indeed, for at least three hundred years Cairo had stagnated and was virtually unknown to the developing West. The response of Mohammed Ali, the founder of the independent dynasty that ruled Egypt until the revolution, was to send military leaders to France to learn the means by which Egypt might gain military superiority or at least equivalence with Europe. In the nineteenth and early twentieth centuries, Egypt was in effect ruled by European governments and exploited by European financial interests.

One of the most popular acts of President Nasser was his nationalization of the Suez canal, which had been used as the basis for a a foreign military presence in Egypt thirty years after so-called « independence » and which had paid European stockholders many times over the cost of its original construction while bringing marginal gains to Egyptians. After World War I Egyptians, like other Arabs, felt betrayed by the Allies to whom they gave their support and who then refused to grant the independence promised in return. While they felt betrayed, they felt powerless to stand up against Western economic and military might. In a sense there has been a feeling of trying to catch up with the West ever since the shock of Napoleon's victory, and Egyptians have suffered from a sense of inferiority *vis a vis* the West in military and economic terms at least. This sense of inferiority, unjustified as many may see it, is often reflected in the dealings Egyptians have with Westerners.

It is within the context of this attitude toward the West that one can understand why Egyptians and other Arabs feel threatened by the existence of the « tiny » state of Israel. They see it backed since its founding by massive flows of German reparations, American aid, and American investment, not to mention other important sources as well, which give it the highest per-capita rate of foreign aid and capital inflow of almost any country in world history. They see it populated by highly motivated, disciplined individuals trained in the most modern techniques of warfare. The record of physical growth of the state as well as the actions and pronouncements of its leaders do little to suggest that they do not intend to fulfill the prophecy written in the Bible that the state shall extend from the Euphrates to the Nile. Many Arabs will ask what chance they have against an opponent so heavily backed by and representative of Western, and more particularly American, power.

The long foreign domination and presence of foreigners in Egypt has given Egyptians a taste for material goods and often a preference for those which come from abroad. The West is seen as being the richest area in the world and one which has solved its basic problems of production. Egyptians find themselves wanting the very things which Europeans already have.

This applies to no Western country more than the United States, which is a special case in the Egyptian mind, partly because it is seen as the richest and possibly the most successful country in the world. The United States was not a former colonial power and in 1956 the United States, simply by indicating its disapproval of the affair, forced the British, French, and Israelis to halt their invasion of Egypt. To Egyptians this was a remarkable demonstration of American power. At the level of personal contacts, relations between America and Egypt have been extremely friendly. During World War 11 American military officers were much more willing to associate with and socialize with Egyptian officers than the British had been. Many Egyptians were educated in the United States in the 1940's, 1950's and 1960's, and, as we have already discussed, many remained there. The fact is that for many of them the life was good in the United States and, at least from a meterial standpoint, better than it might have been for them in Egypt. Most of those who emigrated have relatives in Egypt with whom they remain in touch and to whom they send glowing reports of American life. There is a tendency to ignore or not to hear about the less attractive sides of American life, and so Egyptians probably have an excessively favorable view of American accomplishments. Finally, and with no other logical explanation, Americans seem genuinely to like Egyptians, and this usually elicits a corresponding response.

Government policy over the years has been to keep culture and politics separate. President Nasser said upon many occassions that while he disapproved completely of American policy in the region, he and the Egyptian government had nothing against the American people. And this policy has been continued under President Sadat, thus explaining perhaps the very existence of an institution such as the American University in Cairo and the apparant paradox of your being in Egypt and so warmly received today.

Until about a year or so ago the posture of nearly all the Arab countries toward the United States was passive and defeatist, though not lacking in impressive rhetoric. Until that time they had never used the one great resource which was at their disposal and which Western, and particularly American, companies and governments had taken for granted. This was oil. Then under the spur which was provided by the example of Colonel Gaddafi in Libya, nearly all the oil producing states have managed to vastly increase their net income per-barrel of oil, partly by price increases, and partly by plans for increased participation. I believe personally that part of the motivation for this change was Arab frustation over American policy in the region. Arabs felt continually ignored and kept seeking something that would gain America's attention.

The impact of this change has not even yet been fully appreciated in either the Arab world or the developed nations. But it comes at a time when the West is increasingly dependent upon supplies of Arab oil, giving this region a power *vis a vis* the West that is unprecedented in history. This power is manifest both in the fact that the countries can now control how much oil goes where; it is manifest in the buying power that the region has internationally; and it is manifest in the major, perhaps dominant, role that Arab capital flows have had in international money markets — currently perhaps to the detriment of the values of the United States dollar. While Egypt is not a major oil producing state, as the largest, most important, and still in many ways the most advanced country in the region, Egyptians are intimately involved in the elaboration of this policy and will be playing a major role in shaping the future of the region. I mention this subject here because I believe that such a basic change in the economic power relationship between the Arab world and the West is going to affect the way in which Arabs and Egyptians view the West and deal with Westerners in the future. This reinforces my own belief, as a person who loves Egypt totally aside from any question of power or oil, that if a revolution in American attitudes toward Egypt and this region was overdue several years ago, it is much more so today.

In any case, you will be able to see all this for yourself and to develop your own opinions about this country. I hope that the words of this morning will have made your visit more enjoyable and that it will have been a brief but useful « first step » in your journey through Egypt.

LIVING IN EGYPT

By

Nawal Mahmoud Hassan (*)

One's first glimpse of the Arab Republic of Egypt from the plane can serve as a good introduction to this country, its prospects and its problems. Flying over interminable stretches of desert and rocky terrain until the valley appears as a thin green stem, stretching from north to south on either side of the river, one comes to realize fully the significance of Herodotus' words : « Egypt is a gift of the Nile ».

The need for water is paramount in a country where 97% of the land is desert. Therefore the importance attached to the construction of the High Dam, which increased the tillable acreage by 1 million acres, or 1/6th the total arable land, is clear. Looking down at the highly cultivated, patch-work landscape, which produces an average of three crops per-year, one realises that, in agriculture, Egypt is one of the most « developed » countries of the world.

The sense of peace and serenity that the desert and green valley convey is quickly dispersed on arrival in Cairo where one sees crowded buses, congested streets, high rise buildings and one is faced with one of Egypt's most pressing problems, its abundant population. With a population increase of two and a half % a year, one of the highest in the world resulting from improved medical facilities which reduced infant mortality drastically, the population has doubled between 1900 and 1950 from 10 to 20 million and is expected to quadruple by 1975. From this stems the nation's desire to industrialize as quickly as possible in order to provide an economic base for the increased number of people. Hopefully a decline in the birth rate as has happened in the West will also transpire.

For those who are visiting an Arab country for the first time, this is a unique opportunity to learn about the culture and the background out of which the educational system developed. Recommended is Hitti's, *History of the Arabs*, which, in addition to tracing the growth of the Arab empire, discusses the contributions of Arab civilization ot western culture in the Middle Ages. At that time the Arab world was culturally, politically and technologically more developed

(*) Director, Center for Egyptian Civilization Studies.

and from such Arab outposts in Europe as Toledo, Cordova, Savillo and Palermo, learning and science radiated to Western Europe contributing to the Renaissance.

Living in Cairo in a hotel differs very little from living in any other capital in the world. All big cities have acquired an « international look » and have lost most of their local character, unfortunately, in such settings. Hotels have the same modern international architecture and system and serve the same bland international food. All the services are the same-banks, porters, front desk, hair dressers, post offices and so forth. Yet, despite this uniformity, every city has a special flavor to it which one can gradually discover apart from the ancient monuments, museums, customs and language, which obviously are quite distinctive.

One finds the pace of life in Cairo, in summer, much slower than during the rest of the year because of the climate, which is very hot during the day. During this « dead season »; very little cultural activity or social functions are sponsored by the Ministries or Embassies, museums, offices and libraries which close at 1.00 p.m. Most activities take place in the late evening when the weather is cooler. Enjoy this relaxed pace of life, take an afternoon nap, it will probably be the only time in your life you can afford to, go swimming at clubs in the afternoons, catch up on your reading.

Although this is a slow Season for organizod cultural activities there are a lot of other channels to explore. Egypt has outstanding artists and craftsmen who often have their studies in picturesque old Arab houses dating from the 18th Century, which alone makes a visit there worthwhile. Many of our artists such as Abdel Wahab Morsi, Saad Kamel, Khadiga Riad, Tahia Halim, Fouad Kamel, Effat Nagui Rifaat Ahmed have successfully exhibited in international exhibitions abroad. Visits to the following art and craft centers in particular can be most enjoyable, Al-Mussafir khana in an 18th Century house built by a rich merchant of the Khan Khalili, the Khedive Ismail was born. The house then became the property of the royal family. It was restored a few years ago by the Ministry of Culture. Artists today are permitted to have their studies there, among whom are Abdel Wahab Morsi and Gamal Mahmoud. Beit Al-Sennari built in 1780 by Ibrahim Al-Sennari, originally a Nubian door-keeper who acquired renown in the occult sciences and through his contracts with powerful mameluke emirs, eventually became *Katkoda* or Governor of Cairo. When he fled to Upper Egypt with the defeat of the mamelukes by Napoleon, his house was taken over by the scholars of the

French expedition and the well known *Description de l'Egypte* was prepared there. The house is now used by artists craftsmen under the sponsorship of the Ministry of Culture.

Wekalet Al-Ghuri, this is a perfect example of a sixteenth century inn built by Sultan Al-Ghuri, whose mosque, mousleum and sabil are part of this complex of buildings. Restored a few years ago by the Ministry of Culture, the former stables on the ground floor now hold a magnificant collection of folk costums from the various regions of Egypt including the oasis of Kharga, Dakhla, Siwa, Baharia and the eastern desert. In the rooms above, craftsmen are trained in traditional skills. The courtyard is often used as an open air theater for exhibitions.

Those who are interested in Islamic architecture, and have the patience to explore the narrow back streets of old Cairo, will find their efforts well-rewarded if armed with either Dorothea Russell's, *Medieval Cairo.* People are still camera shy because of the state of war, so it is advisable not to take pictures in congested areas. The Antiquities Department will willingly send an inspector to accompany one and to open some of the unfrequented monuments under local lock and key.

In conclusion to suggest some reading material Recommended could be Lane's *Manner's and Customs of Modern Egyptians* for a glimpse of traditional Egyptian society a hundred and fifty years ago. Second, James Aldridge's, *The Story of Cairo,* which describes the history of Cairo, its rulers and monuments in an interesting manner.

Cultural Heritage :

MODERN EGYPTIAN CULTURE

By

Ahmed Ezzat Abd-El-Kareem *

Egypt, caught up like other countries today in a period of rapid change, is eager to combine modern, western ideas with her own traditional religious culture to create a uniquely Egyptian national culture. The evolution of this modern culture has three principal elements : Arabic language and literature, the religion of Islam, and modern science and technology. The history of this culture is inextricably bound up with educational institutions and foreign invasions. Yet Egypt, the birthplace of one of the oldest civilizations in the world, has never lost its civilized character, even in periods of decline.

The ancient university of Ain Shams, one of the oldest such institutions, was primarily established for religious studies, but subjects concerned with daily life, *e.g.*, mathematics and medicine, were also taught. From Ain Shams came much of the knowledge necessary for building the pyramids and preserving the human body for burial, both activities important to the ancient Egyptians. Another university, that of Alexandria, was famous in the ancient world for its library.

Many Egyptians welcomed the Arab conquest of the Eight Century because they hated Roman rule and religion. After the Arab conquest, Egypt became the center for the religion of Islam and the study of the Arabic language. Islam was not only a religion but also a way of life, concerning itself with man's relations with God, his countrymen, his family, and his government.

By the Middle Ages, Arab civilization had become one of the most magnificent in the world. In this period, one of the oldest Muslem universities, the Azhar, was founded. Western scholars and crusaders alike were astonished by Egyptian achievements, achievements which later exerted considerable influence on the high European Renaissance.

By the late Middle Ages, when Western Europeans had forsaken the overland trade routes through Egypt for the maritime route through Capetown to India and China, Egypt suffered the loss of

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(*) Former President, Ain Shams University.

revenues and underwent a period of isolation. This period adversely affected the country because politics and culture depended upon interchange among nations. Eventually, following the Turkish Invasions, Egypt experienced the dark ages of the Sixteenth to the Eighteenth Centuries.

In 1798, with the French Invasion under Napoleon, a new era, cultural as well as military, began. Primarily because Egypt refused to collaborate with the foreign invaders, the French left the country in three years.

The French period, brief as it was, was significant because Egypt began to realise that the French possessed the secret of strength : modernization. Thus Egypt realized the need for change. The first need was for defense against European oppressors, so a modern army of Egyptian *felaheen* was formed. Secondly, a new system of education, extending from primary school through college, was established. Scholars were sent to European universities to study.

In 1907, the Egyptian University free of government control, was founded in Cairo. Its curriculum was limited to such disciplines as literature, history and geography. In 1925, the first state university was opened on the campus of Cairo University. Until 1961, the other major educational institution Al Azhar had been concerned principally with religious studies, e.g., the Koran and muslem jurisprudence. After 1961, the University modernized its curricula to include medicine, engineering, agriculture, business, education and science.

Thus, a new culture was born. This culture, embodies both the traditional religious values of Islam and modern scientific knowledge.

As Nasser recognized, Egypt had to move inside three circircles : Arabic, African and Islamic. The Arab Constitution of 1956 stated that Egypt was part of the Arab World, both politically and culturally. At the same time, she must recognize her responsibility to play a leading role in the evolution of Africa. Third, she must retain her Islamic heritage, so essential for the study of the Koran and the living of Islam.

Moreover, Egypt has learned that the West can be generous, but at the price of occupying the country. For some Egyptians, this lesson indicates that modernization means Westernization. Thus the strict contemporary problem of culture is to modernize Egypt without assimimilating unwanted patterns of Western thought and action. Responsible Egyptians are therefore involved in trying to weld modern ideas and techniques from the West with traditional religious values and customs in order to create a culture uniquely Egyptian.

ANCIENT EGYPTIAN CULTURE

The Use of Modern Science in Egyptology

By

Gamal Moukhtar *

Egypt, a nation which is undergoing rapid modernization, is a nation which is the storehouse of thousands of historical monuments. There are those of the three thousand year Pharaonic Period; those of the Greek Era, from 332 B.C. to 31 B.C.; those of the Roman and Byzantine time, dating from the first century, B.C. to the seventh century A.D.; those of the rich heritage from the Coptic Christian tradition from the First Century A.D. on; finally, a phenomenal heritage drawn from the Islamic tradition which has prevailed from the seventh century A.D. to the present. To describe the Eras in a brief presentation is impossible. Thus I shall deal primarily with the sub title of this essay.

Some idea of the scope of the artifacts of Egyptology can be demonstrated by a few figures. There are in the United States alone-some fifteen museums with major collections of Egyptian artificats. Museums in New York alone have over 100,000 samples of Egyptology. This year a complete temple (the Temple of Dendour of Nubia) was given to the New York Museum. Similar figures can be given for Germany, France and United Kingdom as well as many other countries. Added to these are the various exhibits of numerous ancient monuments being shipped around the world. At the same time many monuments, pyramids, obelisks, mummies and so forth, remain in Egypt. Many of our monuments are still to be excavated and or otherwise recovered and preserved.

This great heritage, which is important to all the peoples of the Western Tradition, must be protected from the many threats facing them : time, the physical elements, permament irrigation and man himself. Man has been espicially careless in his treatment of the priceless monuments of the past. To accomplish that preservation the governmental agencies responsible for antiquities and ancient culture have been reorganized into four section : the Antiquities Department, the oldest of the sections, responsible for the preservation, restoration, protection, excavation, evacuation and publication of 10,000 Pharaonic

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(*) President, Egyptian Organization of Antiquities.

sites (some with as many as 8,000 tombs); the Museum Department, especialy responsible for the Cairo Museum, which contains over 200,000 pieces; the Documentation Center, responsible for registration of all monuments, publications and the making of models of major items. The fourth is the Section of Projects which has developed the light and sound shows at Giza and at Luxor. To fulfill the responsibilities assigned to these branches of government would require a budget equal to the national budget of Egypt.

Thus, Egypt, a nation which must by necessity pour its resources into the industrial, agricultural and educational sectors, cannot bear this burden alone. In the past, there has been international cooperation in the work of preserving this heritage of Western Civilization; the international campaign in saving the Nubian monuments being a case in point. Today, governments and institutions are cooperating with the Arab Republic of Egypt in joint excavating missions as well as many other preservation activities. For instance the proceeds from the Tutankhamon Exhibit in London will be going to the cause of supporting recovery of other monuments in Egypt.

From all the periods of the Egyptian past important influences have shaped and added to the culture both abstractly and physically. Of all of them the most influential changes have been brought about by three forces. First, Coptic Christianity, introduced during the Greco-Roman Era, which led to resistence first to Roman rule and second to Byzantine domination. Because of the conflict with Byzantium it was easy, in a matter of three to four years, for the Egyptian to accept the second major change Islam and Arabic, thereby discarding a language which had been in use for almost four thousand years. The third impact was the Napoleonic Expedition at the end of the eighteenth century. This brought Egypt back into the mainstream of the developing changes being wrought in the modern world.

With the latter's impact, Egypt has adopted modern techniques to discover, recover and preserve for the world the physical remains of its past which has contributed so much to the development of other cultures. Those modern techniques and technologies have become necessities for today's archeological work. The well-known carbon 14 test, used to determine the age of organic materials with good accuracy up to 50,000 years is but one example. This technique was used to bear out the accuracy of the dynastic listings of Maneths on which ancient Egyptian chronology has been traditionally based.

Scholars are now hopeful that the computer will come to their aid in reconstructing the period of the 14th Century B.C. « heretic king », Amonhotep IV (Ikhnaton) who tried unsuccessfully, to convert all of Egypt to the worship of one God, Atom, who was represented by the sun disk.

Of special importance to Egyptology is the world famous Rosetta Stone, discovered by a soldier of the French Expedition in the Nile Delta. This stone was the key discovery that lead to unlocking the secrets of ancient Egyptian culture. Written in three languages, heiroglyphics, demotic and Greek Coptic, a British scholar, Thomas Long, who almost deciphered it in 1821, and a French scholar, Champlion, who did succeed in translating it in 1822, the stone provided the vehicle for interpreting thousands of ancient documents, steles, monuments and other antiquties.

After his death and the restoration of the worship of Amon-Ra under Tutankhamon, the temples and other buildings Ikhnaton had constructed at Tell el-Amarna were destroyed. It is believed that the computer may be able to piece together the story and the conflict contained in the over forty thousand fragments that have been recovered from the site(1).

Cosmic rays and X-rays are being utilized to determine if the pyramids might contain rooms and chambers not yet known. As of the present, while no new rooms have been discovered by the use of these instruments, they have saved a great deal of labor, money and damage to the structure had conventional means been used to answer the question.

In some cases, X-rays have suggested the cause of the death of a mummified specimen. X-rays of the skull of Tutankhamon revealed the existence of wisdom teeth and thus made it possible to estimate more accurately his age at death.

Another technique employed is that of performing autopsies on mummies which has revealed much valuable information. Scholars have been able to fit the mummies into blood groups, and in one famous case, this technique helped to establish that Snenkhkere and Tutankhamon were brothers.

As exciting as this work is it is very demanding of time, manpower and money. Therefore, since the historical heritage of Egypt is important to all of Western Civilization, nations must continue their support of Egypt in the efforts to uncover, to interpret and to maintain these priceless survivals of one of the world's earliest and richest civilizations.

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(1) See *National Geographic*, Nov. 1970.

TOWARDS UNDERSTANDING ISLAM

By

Mohamed I. Kazem *

INTRODUCTION

The world of today is confronted with problems which it may not be able to solve or even successfully face. Inspite of material prosperity and materialistic progress, people still do not have peace. Man knows, no matter how advanced he might think he has become, that he has not achieved satisfaction nor fulfillment. As a matter of fact, it is evident that injustice, misery, exploitation and unrest are common in the life of modern man. These things, in the modern world occassionally, are worse than before. Thus there is obviously a challenge facing man, and as far as Muslims are concerned, the challenge is greater because Muslims believe and declare that « Islam is the true religion ». (Koran 3 - 18)

The problem for the Muslim is not how to search for a better materialistic life as such. Objectively, a better materialistic life *per se* can not be enough for any one. Furthermore, religiously, such an approach would indeed be strange to Islam. The real problem and the real challenge is how Muslim peoples and communities may achieve the kind of rounded progress as understood and instructed by Islam.

In order not to lose sight of our purpose, we have to actually know what Islam means to us. Without such a comprehension things will become confusing. Any definition of Islam must be based upon and elaborated within the light of what is stated in the Koran and what was reported to be the practice of the Prophet.

What is Islam :

Islam, a monothestic faith, is hereby defined as the divine message as well as a set of guiding principles which integrate all kinds of interactions among men on the basis of justice, mercy and goodness. This in light of an emphasized belief and faith that this life is not the end but only a phase in a continuous life, the latter part of which is called the life after.

(*) Dean, Faculty of Education, Al-Azhar University, Cairo, Egypt.

This can best be explained in a number of items. The first simple truth is that God is one, the only one. He is the creator of the universe and as such, is the Lord of the Universe. He is compassionate and merciful. All men are responsible for their deeds. « Whoever will do an atom's weight of goodwill will be rewarded therefore on the day of judgement; and whoever does an atom's weight of evil, will likewise be punished therefore » (99 — 78). In Islam there is no place for doubting the oneness of God. « Allah bears witness that there is no God but He, and so do the angels and those possessed of knowledge, maintaining justice. There is no God but He, the mighty, the wise » (3 — 18).

« Say, He is one, Allah is He on whom all depend. He begets not, nor is He begotten; and none is like Him » (112).

« Allah there is no God but He the ever living, the self subsisting, by whom all subsist ». (3 — 2)

« So your God is one God, therefore to Him should you submit ». (22 — 34)

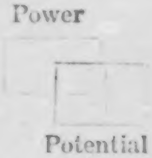
« Surely Allah forgives not that a partner should be set up with Him, and forgives all besides that to whom He pleases. And whoever sets up a partner with Allah he devises indeed a great sin ».

The second truth is that Islam represents a complete way of life. It is not solely a religion in the sense it is restricted to only performing certain rites. Islam refers to, regulates and interfaces in all aspects of life. All dealings, all activities, are integrated with the faith in one God as the background. Of course this means worshipping God, and in worshipping God it means fulfilling His will. As a matter of fact, a Muslim believes that the purpose of creation is following the will of God and submitting to His will. In this respect one has to acknowledge rites such as, formal prayers, fasting, *zakat* (alms) and performing pilgrimage All these are important aspects but they are not everything.

They are measures to creating an atmosphere and building up a sitation where Islamic life can be established. Furthermore, to do things properly is in fact a form of worshipping God. If a teacher is doing his best, if an engineer is serious in his design, if a soldier is sacrificing his self in defense of the nation or for a noble cause, if a businessman is facilitating commercial transactions without which a community can not survive or advance and so forth, then all these people are, in their way, involved in worshipping God. So worshipping and praying, in the final analysis, are participation in the building up of a sound community and in the making of it easier for this community and for the individual to have greater peace, satisfaction and tranquility. This is the process of elevating spiritual conditions and reflecting them in one's individual and societal actions. If this happens with the continuous apprehension of God, and the continuous sensing of God's presence everywhere, then certainly it is a fine way of praying and worshipping God. To that end it is necessary to explain the concept of the relationship between the oneness of God and freedom. Second, how man has freedom within the concept of the oneness of God. Each man possesses power and potential. Freedom is that portion of the interrelationship of the two. By power what is meant is the total capacity of the individual : education, intelligence, resources, force and so forth. Thus, the individual has :

Power
Potential

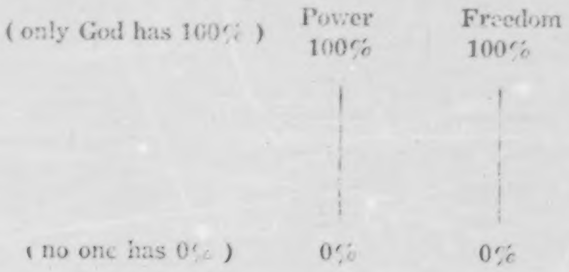
When they are joined :



That which overlaps is his freedom (opportunity). It is that which he is permitted to do because it is the area that the strengths and weaknesses of the individual in specific areas and situations.

Those portions of potential and power that remain unused for long periods of time are constantly deteriorating. For example, if one learns a foreign language, but never has the opportunity to use it that would be out side the realm of freedom (opportunity) and would be deteriorating.

Looked at another way one can view power and freedom as two scales :



The position of an individual on these scales is determined in relationship and comparison with others. Further, the individual may not exercise more of one than the other because they are co-equal.

All aspects of life are related and interrelated as far as Islam is concerned. These are integrated into one total whose full recognition of the presence of the creator is a part. Islam, thus is not just worshipping in preparation for a life to come, it is also a means for the achievement of betterment of the immediate life on earth. This immediate life on earth is definitely a part of a whole picture. The muslim is on this earth to make it a better place. This statement means, in a board way, that the muslim should strive for technical and scientific advance and the utilization of man's progress to contribute to his materialistic prosperity. The only condition that we should not forget is that comfort and better living, while desirable, are not the final goals in life. They are parts of a whole. They are not isolated from man's ideology nor from his spiritual nature, but rather are a recognition and interpretation of his very spirituality. So modernization and advancement can contribute to the lifting of the morals of man and the increasing of his ability to perfrom and define his spiritual ideas and aspirations.

The third item refers to the scope and dimensions of Islamic thought. Islam refers to three dimensions, one of them is what has already been touched upon : the relationship between man and the creator. This is the testimony and belief in one Supreme Being, the God : Allah. Actually this relationship is the crown and the gate for the other relationships. The second dimension is the relationship between man and man, such as an individual's behavior, respect, confidence, dignity, and so forth. The third dimension is the relationship between man and community, that is the existing institutions, systems and organizations. The second and the third dimensions are reflections connected with the affirmation of faith. Thus man cannot pretend to be a good Muslim if he lives in a remote place, on top of a mountain, far in the desert, in fact, anywhere in isolation from humanity, imagining that it would suffice to forsake the world and devote himself to prayers and contemplation.

As a matter of fact, prayers and contemplation are most meaningful where they are helping the individual in his endeavors in the struggle toward what is good, just, merciful and dignified. This is because he realizes that he is not alone, and that God is supporting him.

Good morals, greeting people properly, abstaining from hurting others, putting one's self in the service of others are important and good items within the second dimension. In the third level that of one's responsibility and loyalty toward others, for example, the school's for the students, the community's for the citizens, the nation's for citizens and man's for humanity is most significant. All these highly enhance and gain meaningful depth if acted upon integratedly with the first dimension. Alone any dimension is incomplete. Muslims as individuals of others, as well as their failure and misery, is the responsibility of others, as well as their failure and misery, is the responsibility of a Muslim.

The twentieth century is a century of movement, fast changes and industrialization. It is a century of the greater application of man's thinking, of greater production, of the greater application of science and technology and of greater consumption and aspirations. Muslims are invited to all of these. They are invited to use their minds more and better. They are invited to learn and use their knowledge. They are invited to the most updated technology, to apply it and to participate in its advancement. Islam calls for progress, a dynamic, forward movement, but this is not looked at as an end in itself. The end is to put all on the basis of justice and mercy.

The problem of the Twentieth Century is to furnish the formula that can keep all these parts in balance. The question now is why it so happens that Muslims in the Twentieth Century in many places are not modern enough, meaning that many of them still do not really belong to the Twentieth Century. Many of them belong to the so called developing countries and developing communities. And second, why it so happens that most of the advanced countries are in many cases non-Muslim.

It is said that the Twentieth Century is, more or less, purely materialistic. If this is the case and one finds great dissatisfaction associated with great technology then, obviously there is something wrong with pure materialism. The truth is that the Twentieth Century can progress but, not necessarily, along either materialistic and/ or westernistic lines. Progress is in the quality and extent of using man's mind, wisdom and rationality for his own happiness.

In this sense Muslims are required to use their minds. If they do not do that and so become less advanced then they, religiously, are wrong. In order to be better Muslims they are expected to be more progressive. That is to say that slow movement in a fast moving world is contradictory to Islam. Thus it is the religious duty of a Muslim to be advanced and progressive. It is the religious duty of Muslims to practice and use industrialization, but, of course, for a greater prosperity that enables more people to live better, and with greater dignity. Failure to catch up with modernism is not a fate that Muslims should submit to. Rather it is a situation that Muslims should struggle against. It is also the religious duty of Muslims to formulate a solution for the Twentieth Century problem, that is the conflict between matter and spirit. If Muslims claim that there is no such conflict or separation and man is an integrated whole then they must be strong enough, wise enough, respected enough and advanced enough that others will listen to what they have to say.

In conclusion, Islamic thought and practice need the kind of education that makes them both feasible and successful. Islam is a series of dynamic interactions operating wherever man displays symptoms of life. Muslims have the right to live, to move, to labor within the frame of reference of being good, that is, being just, dignified and merciful. The possibility of this is dependent on an educational system that can produce free, dynamic men, full of faith, confidence, mercy and love. Thus, any Islamic education must have certain elements to be applied under different conditions and circumstances in different forms. These elements are :

(a) since all men are equal and responsible, equality of opportunity should be the base for building up an Islamic system of education;

(b) since man is on earth to worship God, in the broad sense of the term, that is to fulfill and to submit to God's will, then education is to help in developing the insight of students to appreciate God, the univrse and life. Special reference to teaching the individual to be good, that is to have the moral courage to use his mind, to be fair, tolerant, merciful and pious is important;

(c) since man is entrusted with this earth and that land, skies and seas are to be of service to him, education has to make available this knowledge, to provide the means of getting this knowledge and to participate in advancing it. All this so that man can be in a better position to live a better life.

Those elements mean that Islam requires both the individual and the community to produce contributions in terms of actual things now. Second, to, in the immediate future, continually improve those things, in other words, endeavor to progress. It also requires a Moslem to enjoy and appreciate those things; however, that must not become an end in itself. The will of God is to be happy and to enjoy life because it is a reasonable undertaking, because life is intentional and meaningful. Thus technological progress is good as a part of progress, but not as an end in itself. If it becomes an end then man will become unsatisfied.

A Moslem is required to keep the environment clear as well as to make it more practical and beautiful. God created the environment for man to use not to destroy. Islamically speaking, in the legal sense, this land is not any one man's property, but he, and all men, can have it to use.

Pollution of the environment is not allowed. Each is allowed to use what he neds, but not more. Second, one is not allowed to destroy what need not be destroyed. This earth is entrusted to man, thus, man on this earth cannot live as an individual, but must live within the community, within the society. To do that he must be educated.

Education is the process of helping man to grow and to achieve, that is, to progress in a rounded way, a way which is spiritually and materially integrated. Muslims need to be reminded that they can do just that, and, by doing so, contribute to their betterment and the improvement of the world in general. After all this is a part of their responsibility that they should not shy away from. The real history of a people is not its victories but rather its achievements. If Muslim history is clearly under-stood then one can be in a better position to appreciate, in a clearer way, the points just made. Using that appreciation the past and the present can be integrated and used to lead to a brighter future that man certainly deserves.

THE MUSICAL LIFE OF EGYPT

By

Samha El-Kholy *

The East and the West have developed two entirely different styles of music. The West has evolved a harmonic-polyphonic system, which was, until recently, quite alien to the East, while the East has explored subtleties of melody and rhythm unknown to the West. Yet the musical life of Egypt has achieved something like a synthesis of these two aspects. In Egypt nowadays, the traditional music, the art music and the folk music, lives and thrives together with Western music, classical, jazz and pop. Out of the co-existence of these two aspects, there has emerged a new modern Egyptian polyphonic music based on a fusion of the Eastern tradition and the Western techniques of composition. We shall try to represent these three elements which constitute the main trends of the musical life of Egypt, the orential, the Western, and the modern Egyptian music.

The traditional Arabic music of Egypt represents an aspect of the common language practiced in all Islamic, Arabic countries, Syria, Lebanon, Persia, Turkey, Iraq, Libya, Tunisia, Morocco and Algeria. The main features of this common Arabic music are : melody and rhythm only. Its melodies are based on *modes*, and not the scales of the major-minor system of the West. Each mode has its peculiar arrangement of intervals, and hence its special mood or atmosphere. The modes are *either* diatonic, i.e., consisting of whole and semitones, or special combinations of them, such as the augmented second, which is widely used in many typical modes, Hijaz and its derivatives, or they contain the so-called neutral third, or the «three-quarter-tone» interval. To simplify this let us say that the basic scale of Arabic music has flattened third and seventh degrees, that is the third note of the scale is a *neutral third* which is half way between the minor and the major-third. To European or American ears, this might sound rather out of tune, but to us it is the essence of the Arabic modality, and the most characteristic feature of our traditional music.

I will now play you a classical song in the mode *Rast*, a Persian word which literally means correct, to illustrate this *neutral third* and

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(*) Director of the Cairo Conservatoire.

seventh degrees. It is a very old type of monodic choral singing which uses the old rhythmic modes, here we have a rhythm of ten beats divided irregulary to 3 + 2 + 2 + 3. Incidentally this song, or *mowachah*, was composed about sixty years ago by a famous Egyptian composer, Sayed Darwich, exactly in the style of the oldest *Mowachah* : you will have a good impression of the mode.

«Ya chadi'l alhan» — Sayed Darwich State Ensemble of Classical Music, Conductor A. Nuweira, Ministry of Culture.

Our music is very rich in modes, they actually amount to one handred or more, but they have been classified according to main types. There are nine basic types of modes or *maqams* as they are called in Arabic. There are local preferences in each Arabic country for certain modes, but the general modal system of classical Arab music is common to all countries.

We have «rhythmic modes», that is complete units based on a succession of strong and weak beats, arranged in special ways, or modes. Some of the most interesting rhythmic modes consist of an uneven number of beats to each unit or pattern, such as 5, 7, 9, 13, that is to mention only a few of the most characteristic rhythms of classical Arabic music. Our rhythms are accenutative and are based on the marked differentations between strong and weak beats. Here is another very old song whose composer is anonymous, it is in one of these complex rhythmic patterns, melodically in the mode *Hijaz*, where one may easily notice the augmented second. It is performed by the State Ensemble for Classical Music, formed by the Ministry of Culture in 1968. This Ensemble has scored a tremendous success throughout the Arabic countries.

« Lamma bada Yatathanna », old *Mowachah*, anonymous.

This classical music has been recently revived after a period of depression in the forties and now occupies an important place in the musical life of the country. Sales of the records of the authentic performances of this ensemble are the highest among records of sales of Arabic music.

The other side of the traditional music is that of the folk music of the various ethnic groups which live alongside the shores of the Nile and in the desert, the oases, and on the shores of the Mediterranean, peasants, Bedouins, fishermen and sailors. All have their own musical dialects, their characteristic instruments, songs and dances. The folk music of Egypt is still in the process of being collected and recorded. The Center for Folklore Research was founded in 1956 and has since organised many expeditions to collect and record music, especially from parts where drastic changes threathen the folkore, as in Nubia where the building of the High Dam has changed the life and environment considerably.

The Ministry of Culture has issued a series of records of Egyptian folk music, which cover most areas of Egypt, and represents the various dialects, if we may apply this word to music. I would like to play for you an example of a song from the oasis Siwa, sung to the accompaniment of a drum and a local type of pipe.

« Folksongs of Egypt », first record.

Here from a different part we listen to an ensemble of wind instruments, of the seed type, which play this piece to accompany the well-known horse-dance. This peice was recorded in Upper Egypt.

Here is an instrumental peice, performed by a consort of violas, or *rebab*, the ancestor of the violin. The solo musician shows a refined use of the bow and a beautiful tone.

The great wealth of art and folk music in Egypt has been handed down for many generations by aral tradition. Nowadays a great effort is made to commit this music to notation, therefore many collections have been published of traditional and folk music. The spread of the radio and cinema in Egypt have had a negative influence on traditional music. Through them all kinds of Western music have found their way to the common listener. It is true Western music was first introduced in Egypt early in the nineteenth century when Mohamed Ali founded the military music schools, and later when the Khedive Ismail founded the Opera house.

Then Italian opera began to be a regular feature of the official musical life, although it was largely confined to only a certain class. The public at large though continued, during the following decades, to enjoy modern popular songs produced by many famous song composers such as Mohamed Abdel-Wahab, the *doyen* of contemporary Egyptian song composers. His fame is only paralelled by that of a famous singer with a phenomenal voice, Om Kalsoum. Both enjoyed a great popularity in all Arabic countries. Their songs were mainly *monodic*. Abdel-Wahab later introduced the practice of the «arrangeur» who harmonized and orchestrated his melodies. This practice became the vogue with many lesser composers of songs.

Besides this main stream of modern monodic songs there are other interesting features in our musical life, features which represent another aspect of Egyptian music. Serious composers who have studied the Western technique of composition have tried to create a new Egyptian music in which the Oriental spirit is expressed in an international idiom and through Western media. Of this « national » school the first generation, were mainly amateur musicians. The most famous of them was Abou-Bakr Khairat, the composer-architect, who founded this complex of buildings, called the City of Arts, and who was the first Dean of our Conservatoire. I should like to introduce one of his art songs, composed to words in classical Arabic. This delicate verse is in the lied form. It is performed by one of our leading members of the Egyptian Opera Troupe, Mme. Amira Kamel, who is also a teacher in the singing department of the Conservatoire.

« Nazratun wahidatun », for soprano, by A. Khairat.

This song however does not show the national streak of Kairat's music at its best. Here is part of his orchestral and choral setting of an old *Mowachah* of Andalusian origin. This recording was made in 1967 at a gala performance given for the opening of the Sayed Darwish Concert Hall. It is performed by the Cairo Symphony Orchestra, founded in 1956, conducted for that occasion, by Charles Munch, and accompanied by the Opera Choir, also founded in 1956. This *mowachah* will remind you again of the complex rhythms of ten beats mentioned before.

« Lamma bada Yatathanna », by A. Khairat, for orchestra and mixed choir.

Having mentioned the Cairo Symphony Orchestra, it might be of interest to know that it gives weekly concerts conducted by Egyptian conductors, such as Ahmed Ebeid, Youssef El-Sissay, Taha Nagui and others, or by guest conductors from many countries, Yugoslavia, Tchekoslovakia, Germany, Austria, among others. It also plays with the Egyptian Opera Troupe, during its season, and with the Cairo Ballet Troupe. Needless to say that the musicians of the orchestra, the choir, and the Opera Troupe are all trained, at the Conservatoire and or at any of the other of the three musical institutes in Cairo. One of the major of these schools is the Institute for Music Education, the oldest music school in Egypt, founded in 1932. Another institute is for Arabic Music, it trains graduates in Arabic classical music. The ballet dancers train at the ballet institute. The Academy of Arts is the complex of the Institutes for Ballet, Drama, Cinema, Conservatoire, Arabic music and Art Criticism.

After this slight deviation into the realm of music education, we come back to the new Egyptian school of national composers. Belonging to the same generation as Khairat there are two other composers, all dead now, they are : Hassan Rachid and Youssef Greiss. Rachid was mainly interested in vocal music and occupies the historical place of the composer of the first Egyptian opera. This opera although composed thirty years ago was only produced this year for the first time by the Egyptian Opera Troupe. Here is one of the protagonists of this troupe, Mrs. Nabila Erian, to sing us an invocation, a prayer to Isis sung by Cleopatra, when she heard of Antony's death :

« Fais », « Fount of Tenderness », for soprano.

It was very brave of him to compose this music at a time when there were no possibilities for its performance. Here is another of his songs an interesting *lied* entitled « Time », sung here by another protagonist of the Opera Troupe and head of the singing department at the Conservatoire, Mme. Carmen Zaki,

« Time », song by Hassan Rachid.

Of the second generation there are three contemporary composers who represent different aspects of this school. Azíz El Shawan has composed many orchestral works, a set of variations on a folk song for orchestra, two cantatas, a symphonic poem, « Abu Simbel », inspired by the Pharaonic temple, an opera, and some piano and chamber music. Let us listen to part of his « Abu Simbel », for orchestra and choir.

Gamal Abdel Rahim (1924 —) is a composer of modern tendencies. His national style is based on the oriental modality and complex rhythms. He has composed orchestral music, piano and chamber music, a cantata for baritone solo mixed choir and orchestra, and many new choral versions for unaccompanied choir, a capella, of folk songs and children's songs. He is also Professor of Harmony at the Conservatoire. Here is one of his compositions, a Fantasia on an Egyptian folk tune for violin and piano, performed by one of the students of the Conservatoire, who has just passed his diploma (graduation) examination today.

Another selection of his is one of his successful choral settings of folk tunes :

« Marmar zamani » for mixed choir.

Music by Gamal Abdel Rahim.

Another composer who tackles the problem of a national Egyptian style is Rifaat Garrana, who has composed various orchestral works, including two symphonies, and a *qanoun* concerto; the *qanoun* is a string instrument of classical Arabic music, it is rather like the cimbalon but is played by plectra. Here is an example of this essay for an oriental solo instrument versus the orchestra in which tunes of religious Islamic music are used.

« Concerto for *Qanoun* and Orchestra » by Refaat Garana.

The Cairo Symphony Orchestra, and the graduates of the Conservatoire all perform the works of the new modern composers. They are also regularly broadcast by the « musical services » of the Egyptian Radio, which transmits for twenty hours daily good classical and Egyptian music.

Music for the cinema and theatre is an important branch of activity for our national composers, and of the still younger generation, who have studied theory and composition at the Conservatoire. Let me point out that I am not over estimating the role played by the Conservatoire (as its director), but it in its short life, 14 years, has really managed to change the musical life of Egypt. Many of its brilliant graduates are now continuing further studies abroad, some of them have won prizes in international competitions, such as the pianist, Ramzi Yassa, the violinist, Hassan Sharara, and others. Today there are Egyptian soloists who perform various instruments with promising virtuosity. To conclude I shall ask the violinist to perform for you a short piece by Paganini, something from the international repertoire of all violinists.

« Mounir Nassreddine ».

Girls are finding their way to our orchestra, and here is a flutist who has just passed her graduation examination of the Conservatoire, Miss Nahed Afifi, to perform for you a solo piece by A. Honneger,

« Danse de Chèvres ».

Our last piece is by a brilliant baritone who is a member of the Egyptian Opera Troupe and a graduate of the Conservatoire. He has sung many roles in the performances of the troupe in « Boheme », « Traviate », « Cavelleria Rusticana », « Aida » and other operas, Gaber El Beltagui.

Besides serious music, Western pop music is widely practiced by amateur groups of students, almost entirely self taught, who usually turn into professionals. The guitar and electric organ are in great demand among a certain class of our youth. Through their practice of pop music, they gain some knowledge of Western harmony. But all their efforts are confined to the performance of the Western repertoire, without any attempt at creation. However the wide public consumes what may be called Egyptian « pop », light songs, oriental in melody, and slightly harmonised. Pop and jazz instruments figure in their orchestration. The only domain which remains purely oriental is the classical Arabic instrumental and vocal music, as represented by the Ensemble of Classical Arabic Music, and the folk music practiced by the people everywhere outside towns.*

(*) It is regretable that the music mentioned and preformed in and with the essay could not be included. Yet it was felt by the editors to be of enough significance to be mentioned within the text.

MODERN ART IN EGYPT

By

Aly Khaled *

The contemporary Egyptian artist either has been influenced by the characteristics of Egyptian heritage, or has developed and modified this heritage by the influence of the current artistic movements in the world. Therefore, it is necessary before talking about Modern Egyptian Art, to give a brief introduction to the important artistic phases which have influenced the contemporary Egyptian artist.

Egypt has passed through four civilizations, each of which has had its own characteristics. These civilzations were the Ancient Egyptian, the Greco Roman, the Coptic and the Islamic. To study the characteristics of Ancient Egyptian Art one can do it best by looking at the relief and mural paintings.

« *Geese* ». Tomb painting near Medum. 4th Dynasty (2680 — 2565 B.C.) Cairo Museum.

The birds fill the panel in a balanced composition which is both naturalistic and abstract — naturalistic in that the artist has observed closely the birds and their movements, abstract in that he has reduced these observations to a decorative pattern.

« *Hunting Scene in the Marshes* ». Tomb of Nakht. Thebes, 18th Dynasty (1400 B.C.) British Museum.

In this painting the noble is standing in his boat and driving the birds from a papyrus swamp with his boomerang. In his right hand he holds three birds he has caught; his hunting cat, on a papyrus stem just in front of him, has caught two more in har claws and is holding the wings of a third with her teeth. His two companions, his wife and his little daughter, are enjoying the lotus flowers they have gathered. The Egyptian artist here reached a high degree of refinement. His keen observation can be traced in these sagging, lifeless birds, in the giddy flying ducks, in the flowers and in the plants. Everything is drawn with truthfulness. This is the true vein of realism.

(*) Director of the Museum of Arts, Alexandria.

Yet it can be noticed that a greater feedom of pose and variety of movement Exists here than in Old Kingdom work. However, the drawing of the noble, his wife and little daughter was still based on traditional conventions of profile rendering.

« *Musicians and Dancers* ». Wall painting : Tomb of Vizier Rekhmire, Thebes, 18th Dynasty, (1400 B.C.).

The painter has captured the girls so well that we can almost hear the piercing music. The graceful swaying renew the play of movement. The artist's point of departure is the disciplined vertical, but he uses the harp to usher in a transitional line which, itself, prepares one for an even more inclined one on the other side of the instrument. Thus, a progressive sense of rhythm has been established, linking the purely vertical line to a clearly drawn absolutely horizontal line.

« *The Seven Celestial Cows* ». Tomb of Queen Nefertari, 19th Dynasty, 2nd millienium B.C.

This painting shows seven celestial cows being led by the Heavenly Bull. The animals appear to be so regular to the extent that they appear to be stereotypes. It is their very geometrical simplicity that makes it possible to repeat them identically. The figures are laid out along parallel lines. This is something new. It never existed in historic art.

Ancient Egyptian art was not occupied with perspective, which is a modern preoccupation. The figures were flat and two dimensional objects in the background. They were placed in horizontal bands above the principal figures of the composition. A rigid frontality dominated their figures of human beings little attempt was made in likeness or portraiture; the use of geometrical designs and severe stylizations of natural phenomena enhanced by violently contrasting colors produced definition of form and purity of line. Harmony, balance, beauty of color and line are fundamental elements in ancient Egyptian art.

According to Professor René Huyghe, a member of the Academie Française and Professor at the Collège de France, the fundamental harmony and balance found in Egyptian art is because of two almost contradictory elements realism and naturalism, on the one hand, and geometrical order, dictated by the fixed form of agrarian life led by the Egyptians, on the other. Professor Huyghe adds that ancient Egyptian art was the first to discover what has become for us « the essential quality of Art, namely the resources of harmony and beauty which can be derived from those fundamental elements of the language of pictures, line and color ».

During the rule of Akhnaton (1370 - 1352, B.C.), sculpture and painting, for a brief moment, seemed to be freed of the conventions imposed by traditions; but after his death the forms of Art tended to become more stereotyped until other influences, such as the Greek and Roman, introduced concepts which were to replace the traditions of Egypt.

« *A Fayoum Portrait* » of the second or third century, now in the Louvre.

In Alexandria a concern for the inner life opened the way for mystical knowledge which could surely take its bearings from the Egyptian tradition and deeply rooted sense of mysticism. The Coptic era, however, is famous for the emergence of the psychological representation in art. This is seen in the gaze of the portraits of late Antiquity. It was certainly in Egypt that it took its most intense and acute form. For it became a new aspect of that awareness of death and future life which was reflected in effigies, some Greco-Egyptian, some Roman-Egyptian, which have been called the « Fayoum Portraits ».

The eyes staring singularly and with exessive attention seem to open wider and to grow in size. The pupils, which are almost imperceptible, acquire, thanks to painting, a somber depth and a scientillating moistness. A fire seems to light up inside them, a fire of psychological intensity, a painful interrogation that seems to hang in doubt. The eyes, through which the soul seems to emerge, have assumed here an almost excessive importance as a result of their dilation and relentless staring.

« *Coptic Textile* » 4th Century A.D. (Coptic Museum), Cairo.

Coptic Art retained, from the old arts of Mesopotamia and from the Syrians, the undulating vine motif which became a Christian symbol after it had been the emblem of Dionyses. It was still covered by the old code of regular geometry. This is seen in the Fourth Century Coptic textile in the Cairo Coptic Museum. One can see that it « retains, among its dominant shapes the eight pointed star and concentric circles even when it decorates them with coiled design or discreet foliage ».

« *Fatimide Mihrab* ». Sayyida Rokaiya, detail (Egypt 1154. 1160 A.D.) Islamic Art Museum, Cairo.

When Islam came to Egypt the representation of human figures was prohibited. But art cannot easily be suppressed and the Egyptian artist let his imagination play with patterns and form, with a great concentration upon decoration closely associated with calligraphy and with only fundamental geometric and floral motifs.

The artist created an endless variety of designs. He created the most subtle lacework ornamentation known as arabesques, the wealth of invention is seen in the balance and harmony of the color-schemes of Islamic works of art.

In this masterpiece diverse artistic styles, the infinite crowding and swirling up of lines which become tangled into knots can be seen. The straight line, fundamental for Kufic writing is present. The lower part of the panel demonstrates the fact that the old geometrical figures, whose survival in Coptic Art has been noticed, continued to remain, namely, the angular stars by then combined with a sense of the infinite. Here there is no longer real stars with clearly defined outlines, rather they seem to interpenerate, their elements and fragments hanging together like so many curves. So one more cycle of fusion is completed, this time, in the vers heart of Islamic art.

Arabic Calligraphy.

These show the same verse from the Koran written in two different ways.

It is in this way that the Islamic artist became a supreme master of Arabeseque and ornamental style. However, some Caliphs in Egypt, who were less strict with their interpretation of the ban on images, allowed the paintings of figures and illustrations.

This was the rich heritage which the contemporary Egyptian artist inherited and which was kept latent within his conscience during the period of the Turkish occupation and under the rule of the Mamlukes which lasted over four centuries. The art that was known in Egypt then was only applied art, as Egypt was then passing through a long period of stagnation, backwardness and iniquity. The French Expedition revived, to some extent, the almost dormant artistic feelings of the Egyptian people following the preceding era.

« *Vues sur les Bords du Nil* ». Fragonard.

It is interesting here to quote the great Arab historian Al-Djabarty who expressed the Egyptian's amazement when confronted with plastic arts. Talking about the French painters he said, « They are the painters of everything; among them is the painter « Arigo » who paints the portraits of human beings in such a way that the bystander gets the impression that they are emerging in empty space, embodied and on the point of speaking ». This passage proves, that the art of Modern painting came to Egypt with the French Scientific and Artistic Delegation accompanying Bonaparte.

Orientalists.

Later on, plastic arts in modern Egypt was revived by the Orientalists who were fascinated by the sun and light of the orient and painted the different aspects of Egyptian life and scenery. In 1891 the first exhibition of painting in Egypt was organized. In the same year the first artistic union was founded and published the *Artistic Review*. The annual « salon » was held from 1894 to 1896. These artistic events, together with the orientalist painters, were the first lines in the history of modern Egyptian painting. In 1908 the High School of Fine Arts was founded to which talented and enthusiastic youths could go. They were taught by French and Italian teachers who followed either the Academist or Impressionistic schools. The brilliant students were given scholarships to Europe.

Five of the most influential artists leading the artistic movement in contemporary Egypt, are Ahmed Sabry, Mohammed Hassan, Ragheb Ayaad, Yousset Kamel and Mahmoud Mokhtar, the first modern Egyptian sculptor. There are in Alexandria two other artists who are just as great. They did not join the school of Fine Arts, but studied art in the private Alexandrian school of Ateliers. They are Mohammed Naghi and Mahmoud Said.

AHMED SABRY (1889 — 1955) was influenced by his master, Forcella. His interest in the human face is seen in his paintings. Actually he went beyond human features to expressions and feelings. His medias were oil and pastel.

YOUSSEF KAMEL (1891 — 1971) was a prolific artist. In his works he remained a faithful disciple of the Impressionistic school. His subjects either dealt with the countryside or with the popular districts of the city. His colors are vivid and almost glowing with light.

MOHAMMED HASSAN (1892 — 1961) was remarkable for his skill in portrait paintings. He elevated them above actual photography. It was because of his sarcastic nature that he was able to make interesting caricatures in painting as well as sculpture.

RAGHEB AYYAD (1893 —) is one of the pioneers of the revival of popular art in Egypt. He rebels against academism. He believes that modern art should go back to ancient Egyptian art for inspiration. This is clear in his recording of the farmer's daily life. He studied Coptic architecture and Ecclesiastical traditions and his paintings are simple in lines and selected in color. He has a real tendency towards caricature. His splendid works of mosaics show his mastership in this field.

MAHMOUD MOKHTAR (1891 — 1934) was the first Egyptian sculptor, after the ancient Egyptians, whose statues were erected in public places. He called for the return to ancient Egyptian art for inspiration. He was one of the first artists who set aside academic style. He was inspired by the people of the countryside and immortalized their traditions in a neo-Pharaonic style.

MOHAMMED NAGHI (188 — 1956) had the ability to link together Egypt's great past with its present. He had a great interest in nature. He started as an Impressionist, but then he moved toward ancient Egyptian art with a special interest in Egyptian frescoes and mural paintings. His paintings were remarkable for the transparency of their colors and well-balanced structure.

MAHMOUD SAID (1897 — 1964) began painting in the midst of conflicting artistic currents which appeared in Europe at the end of the 19th Century and the beginning of the 20th Century. These artistic movements revolted against Academism and Classicism. Mahmoud Said was first influenced by Impressionism, which he later freed himself from, and soon found his own distinctive style.

Mahmoud Said was interested in painting portraits. His protraits have a psychological depth. In them he combined the values of plastic arts with those of psychology. His paintings of nudes are very sensual; this is considered one of the daring steps in the history of modern painting as women had not appeared in Egyptian painting since the Fatimite Era.

He was also interested in the social and popular subjects. He recorded the daily life of the farmer, the laborer and the fisherman. He painted them at work, at prayer and in their cemeteries. He limited his preoccupations to three main domains; these were sex, religion and death.

Mahmoud Said was neither influenced by the abstraction of ancient Egyptian painting, nor the decorative, abstract, Islamic style. What he took from Egyptian heritage was the architectural, and geometrical balance, the beauty and harmony of line, the color, and the rhythm. To this he added the third dimension : perspective. In this way, Mahmoud Said managed to bring together Egyptian heritage and modern European technique.

After the first generation of artists which have been mentioned, many others graduated from the School of Fine Arts. They were either under the influence of the European schools, or called for a purely Egyptian national art. A third group wanted to discard all of the accepted notions in order to see the world afresh, to let their imagination soar in order to express what was in their personal depths. Imagination, to them, is a great force which their art must express.

In 1938 the revolutionary Egyptian artists issued a manifesto expressing their views and formed a group known as the « Art and Liberty group ». This group organized annual exhibitions through 1948 which were met with great enthusiasm. Through them « Surrealism » was first introduced to Egypt in 1938. The result was that some of the Artists merely imitated the modern European movements, while others succeeded in forming their individual artistic personality. Some of the artists were interested in expressing the spiritual, fantastical or mythological beliefs of the Egyptians. They were inspired by the native legends, they painted the magicians, the sorcerers, the *djinns*, the ghouls, and other fantastic and mythological creatures, analysing these legends and their effect on social life.

The influence of the European artistic movements on contemporary Egyptian art was heightened by the foundation of the *Biennale* of Alexandria in 1955 — an international exhibition for painting, sculpture and engraving. There is no question that this exhibition, the Tenth Session of which will be held this year, has had a great effect on contemporary Egyptian artists, by showing them the latest ideas, styles and techniques.

It has been difficult for the contemporary Egyptian artist, in the midst of conflicting elements, which affect and are affected by environment, heritage, and modern influences, to draw the line between each movement and to say specifically which movement influenced this or that artist. Today it is clear that national boundaries no longer limit the spreading of up-to-date artistic movements. Egyptian artists today are an important part of the contemperary art world.

THE ROLE OF WOMEN IN MODERN EGYPT

By

Sumaya Fahmy [*]

My first concern is to clarify the concept of « modern Egypt ». The significance of the term « modern » may differ from person to person, and from nation to nation. If my concept of « modern » is different from yours, then, there will be no lines of communication between us. Unless I explain my concept to you we may misunderstand each other. You have come a long way. You are trying to create bridges between your country and ours. Therefore, we have to make sure that you understand us.

If one studies the history of Egypt, as it is faithfully preserved in our ancient monuments and antiquities, they will find that the culture and civilization created by the Egyptian people evolved in three great cycles : the Pharaonic civilization and culture, the Christan culture, and the Islamic culture. At first it may appear that these cultures are unrelated. But upon closer study and deeper reflection it is apparent that the cultural values embodied in the Pharaonic art are the complement of the cultural values embodied in the Egyptian-Christian art and Islamic cultural values are an integration of both. Of course, there were intervening periods of decadence and sluggishness.

On the 23rd of July, 1952, under the leadership of Gamal Abdel Nasser, the people of Egypt embarked on a pioneer revolutionary experience amidst extremely difficult and dangerous circumstances. Foreign invaders occupied our land. The Royal Family ruled according to its own interests and whims. Feudalists owned the estates which they monopolised, leaving little to the toiling farmers. Capitalists exploited Egyptian wealth in several ways. But the Egyptian people marched along the path of the Revolution determined to face the difficulties and resolved to confirm their right to life and progress, whatever the burdens and sacrifices. Six principles, carved out of the demands and needs of the people's struggle, were established as the basic goals of the revolution. They were :

1. gaining independence from imperialism;

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2. ending the despotism of feudalism;

3. ending monopoly and the domination of capital over government;

4. establishment of social justice;

5. establishment of a sound democratic system;

6. building a powerful national army.

Since then, the Egyptian people have rediscovered themselves; reopened their eyes to their enormous latent potential; insisted on restablishing new social relations based on new values; have given expression to a new national culture. The Egyptians have a deep consciousness of history and its effect on contemporary man as well as the ability of man to influence history. They have opened their minds to all human experience without fanaticism or complexes. They have an unshakable faith in God, His Prophets, and His sacred messages which He passed on to man as a guide to justice and righteousness.

Thus the concept of « modern Egypt » embodies what is consistent with the philosophy and principles of the 1952 Revolution. The status of the Egyptian woman and the family is described in « The National Charter » which was presented by Gamal Abdel Nasser at the Inaugural Session of the National Congress of Popular Forces on May 21, 1962.

Woman must be regarded as equal to man and must, therefore, shed the remaining shackles that impede her free movement so that she might take a constructive and profound part in shaping life. The family is the first cell in a society and it must, therefore, be afforded all means of protection so that it might be better able to preserve the national culture, to rejuvenate its texture, and to carry along the whole of society in the direction of the goals set by the national struggle.

Within the framework of our 1952 revolution, which represents the awakening of the Egyptian people, their determination to rebuild the Egyptian personality, to search for new values inspired and guided by our Pharaonic, Christian and Islamic heritage, one can delineate the roles of women in modern Egypt. It is self evident that women are members of the society in which they live, citizens. Therefore, the first role of women in Egyptian society is that of citizenship. As citizens, women should assume certain responsibilities and enjoy certain rights. The responsibilities include participating in public service, assuming public office, work in production and defending the mother land against enemies. The rights include the right to vote,

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to be eligible for election to all publicly elected bodies, the right to have access to education at all levels according to their capacities, including receiving vocational guidance and training according to ability and interest and the right to medical care and insurance against sickness and old age.

The social institution of marriage has created two mutually complementary roles for men and women, the role of husband and the role of wife. Marriage in Egypt is also a religious institution which derives its statutes from Islamic law. The role of the wife in modern Egypt involves more than housekeeping and attending to the daily needs of the family. It entails being a life partner, loving one another, supporting one another, facing life together and planning life together.

Closely related to the role of life partner, is the role of motherhood. This is the feminine role *par excellence in Egypt*, both modern and ancient. Intimacy and affection is the relation between man and women, husband and wife. The child is the fruit of their love, the symbol of their union, the hope of the future. Motherhood is tender care, enlightened guidance and deep insight. All these values are beautifully illustrated in the legend of Isis, Osiris and Horus in the bas relief sculptures and murals of ancient Egypt.

Last, there is the sadly forgotten role of women as a citizen of the world. Here she participates as a member in the great human society.

Egyptian women have been able to fulfill these roles since the 1952 revolution to some extent.

The right to vote and to be eligible for election to all publicly elected bodies have been ensured to women on equal terms with men in the 1956 constitution and all subsequent constitutions. However, the number of women exercising their right to vote is very small, 2.7% of the total voters are women. The number of women representatives in the Council of the People (Parliament) is eight, about 2% of the total number of representatives.

The number of active women members in the Arab Socialist Union, the national body created by the cooperation between the representative working forces of the people, is at present 228, 930. This constitutes 1[illegible]% of the total number of members. Special laws have been issued to encourage the participation of women in the Arab Socialist Union. Two seats have been reserved for women in every fundamental unit of the Arab Socialist Union. Aalso, two seats have been reserved for women in the Popular Local Council of each Governorate. But few women have availed themselves of these opportunities.

Women have the right to seek public office except for the office of President of the Republic, the office of judge or magistrate and religious leadership. In 1951 the number of women holding public office was 25 thousand, in 1966 it reached 118 thousand of which 55% were teachers.

To be able to play any of the above mentioned roles in a satisfactory fashion, a woman must have opportunities for education and training at all levels. Primary education in Egypt, from 6 — 12 years of age, is free and compulsory for both boys and girls.

After the revolution, education became free from the primany level through the University. Egypt was one of the first signitories of the UNESCO Convention on the Elimination of Discrimination in Education. There is a steadily upward trend in primary school enrolment which, in 1970, reached almost four million pupils. Of this number, a little less than one-half are girls. The number of girls however drops on the preparatory school level to almost one third, and is reduced much further on the secondary school level. At the University level however, the proportion of male to female students is approximately three to one.

In spite of the great advance in women's education during the last twenty years, there is still a lag in women's education at almost all levels.

Legislative measures in Egypt ensure to women, married or unmarried, the right to acquire, administer, enjoy, dispose of and inherit property. They also have the right to equality in a legal capacity and the exercise thereof. Egyptian women, hawever, are not allowed to leave the country without their father's consent if unmarried, their husband's consent if married, or the consent of a male guardian if they have neither father nor husband.

Egyptian women have the same right as men to free choice of a spouse and to enter into marriage with their own free and full consent. This is not always observed. Man has the right to divorce. Islamic law gives women the right to divorce if they demand it, provided this is stipulated in the marriage contract. If it is not explicitly recorded in the marriage contract, the wife then loses her right to dissolve the marriage.

To demand the stipulation of divorce on her wedding day, a bride would risk offending her bridegroom. This is frowned upon by both families. So the bride in the great majority of cases gives up her right to divorce. This is a good example of how ineffective laws can be when men and women have been brought up to believe in and to practice psychological attitudes which are contradictory to the values embodied in the laws.

Egyptian legislation specifies the minimum age of 16 years for marriage for women and 18 years for men. The registration of marriages in an official registry is compulsory.

It is pertinent to clarify at this point some of the misconceptions concerning polygamy in Islam. Strangely enough, these misconceptions are not found among non-Moslems only, but also among Moslems. The Koran states : (*Sourat-Al-Nessa, Ayat* 2, 3, and 129) « Give the orphans their due property, and do not add their wealth to yours. If you fear that you might not be equitable with orphans, then you may take into marriage a second, third and fourth wife. But if you fear not to be able to be just, then marry one wife only. And you will not be capable of justice, however hard you try, therefore, do not let your inclinations sway you completely ».

The Koran is quite clear. It describes a certain situation where injustice may fall upon orphans; it suggests plurality of wives as a remedy to that evil; it states the conditions which are necessary to prevent the plurality from becoming an injustice; it gives an insight into the difficulties human nature meets in exercising justice and lastly it exhorts man to control his inclinations and passions.

The above steps constitute an integrated method of thinking which Islam teaches, a model of how to face problems in a realistic and ethical manner. Instead of just giving orders, the Koran gives the privilege of facing reality and using judgement in applying a scale of values in the best interest of all concerned. There might be circumstances, rare indeed, where a husband could be just to two wives. For instance, instead of divorcing a wife who suffers from a chronic incurable psychosis the husband could provide her with the necessary hospital care and marry a second normal wife. In such a case he would be just to both wives, giving each what she is in need of, and giving himself his due.

Some men driven by their motives for domination, need to prove their virility, craving for excitement, and so forth, have misinterpreted the Koran in a flagrant manner. They used to take for granted that it was their lawful right to take more than one wife when and how they pleased. The percentage of second marriages (taking an additional wife) per-year, from 1950 to 1954 was 8.96%. For the years 1965 to 1969, it was 8.08%.

Now, the awakening of women's struggle and the advance in general education, are creating a new public opinion against such misuses and twistings of the laws of Islam. In 1971 a committee was formed under the Chairmanship of the Minister of Social Affairs, the second women minister in Egypt since the revolution, for the amendment of some of the arbitrary civic laws concerning marriage and family life.

In 1969, 6.5% of the working force was female. The Egyptian woman has the legal right, without discrimination on grounds of marital status or any other grounds, to receive vocational training, to work, to exercise her free choice of profession and employment and the right to professional and vocational advancement. There is, however, some social pressure for limiting her vocational training to so called feminine occupations. More and more women who know their own minds and realize their own abilities, are breaking down the barriers between so called feminine and masculine occupations. Today, we may not be far from the truth when we say that Egyptian, urban women have entered almost all professions. Rural women engage mostly in agricultural work, in poultry raising and in dairy production. Even when the urban woman was veiled and sheltered in the dark seclusion of her home, the emancipated rural Egyptian woman worked in the fields side by side with man.

The principle of equal pay for work of equal value is legally applicable in Egypt by virtue of the Constitution and the labor laws. Also insured by law are social insurance and medical services. Special social assistance is insured by legislation for working mothers in the form of baby care centers attached to factories employing over 100 women. Other child care services are offered in both urban and rural communities. It is true that many more such services are needed and the government is planning to increase their number, particularly in industrial regions.

It is interesting to note that some occupations are undervalued just because they are a female preserve. For example a nursery or Kindergarten teacher, mostly women is not put on equal footing with a secondary school teacher, mostly men. Here arises the importance of objective job classification and evaluation for purposes of ensuring equal renumeration for work of equal value.

Egyptian, working women have the right to paid maternity leave. Consequently, employers prefer men workers. The lawmaker values the protection of maternity, whereas the employers holds it against women.

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Despite the Charter of the United Nations, the Universal Declaration of Human Rights, and despite the progress made in the matter of equality of rights, there continues to exist considerable discrimination against women all over the world. There is no doubt that legislative measures following the 1952 Revolution in Egypt have contributed markedly to the elimination of discrimination against women. But legislative measures alone are not enough. Certain obstacles which *hamper social change are not affected by legislation. These are the* psychological factors — the habits, the biases, and prejudices a child learns within the family circle, the attitudes of men toward women and the attitudes of women toward themselves.

The attitude of men toward women is built around the idea of the inferiority of women in every aspect. Therefore women have to submit to the will of the « superior sex » who are entitled to plan and direct their lives and be their guardians. This attitude is acquired either through example or precept. Boys learn it in the family, at school, in the club, in whatever social institution they join. Mothers, having been brought up to think of themselves as inferior and helpless, transmit the same attitude to their daughters.

To produce social change, which is in harmony with the dignity and worth of the human person, we have to change the attitudes of men toward women, and the attitudes of women toward themselves. This requires that special efforts be exerted to educate boys and girls from early childhood to a faith in fundamental human rights, in the dignity and worth of the human person, whether male or female, and in the equal rights of men and women to develop their full potentialities in the service of their countries and of humanity. Through education we should also direct public opinion toward the eradication of prejudice and the abolition of customs and practices which reinforce the idea of the inferiority of women.

It is not my purpose to go into the details of the educational process. But what I would like to emphasize is that well conceived education moulds the personality of the individual in a way which is beyond the effect of legislation. Well planned education helps the person to learn new ways of behaving, to modify old habits and to form new attitudes. Gamal Abdel Nasser said : « It is much easier to build factores than to build human beings ».

Laws tell us what to do; give warning or admonition. Through education we are motivated to behave and learn how to behave. So, education and legislation are complementary and should go hand in hand. This is how we envisage further progress in helping women to fulfill their roles in modern Egypt.

THE FAMILY IN EGYPT
ANALYTICAL AND PSYCHOLOGICAL STUDY

By

Ramzia El-Gharib *

To discuss the family in Egypt here is not an easy matter. The Egyptian family had, and still has, the fingerprints of very complicated cultural traditions which go back to the pharoes, and in which we find the influence of the Arabs, the Turks and even modern western cultural effects. Therefore I shall refer only to the most characteristic aspects of the familiy in Egypt.

One of the most characteristic aspects of the family in Egypt is its great solidarity, the insisting efforts to keep and intimate relationships among its members. This may be because of the fact that the Egyptian family is mainly a consanguine, and not a conjugal, one. That means that the main central relationship is that of the blood relatives and not that of the married couples. Grand parents, uncles and sometimes in-laws often live together and play important roles in the life of the family. However this picture is not exactly the same in urban settings where the Egyptian tralitions are undergoing some changes affected by the gradual transformation to an industrialized culture and the growing influence of western culture. Young couples in the urban districts insist on living away from the influences of the parents and the older generations. As a matter of fact, some of them dream of migration to countries abroad.

Inspite of the possibility of the evolution of another kind of family structure in urban settings many of the consanguine traditions still work. As an example, one can refer to the family's obligations to its members in crisis and difficulties, such as in cases of death and divorce children are assured of care and homes. The elderly are also cared of by the family, for even if they are not dependent upon the younger generations in the family, yet they are looked after and they remain within the nucleus of the continuous and permanent family.

In the rural setting, where 62% of the whole population lives, the family keeps its economic, productive functions. Most of the necessities of life are manufactured at home.

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In the higher and middle classes there has been strict division of labor between men and women. While women work at home as housewives, men have to support the family economically. This is not the case with the rural, lower-class family where both men and women work outside the home doing the same work and both may support, economically, the family.

In rural communities the father is the person responsible, by tradition, by civil and religeous law, for the economic support of the family with all its blood relatives. These duties give the father authoritative rights over his children and wife. He is the one to plan the economic life of the family, to guide and choose the type of education his children are to receive, he is the one to reward and to punish, to force his opinion upon the family even in regard to the marriage of his sons and daughters.

This is not the case with urban families, 37% of population, which no longer perform a direct producttive function. In many families the mother goes out to work in order to raise the economic standard of the family. In return she gained more freedom and a better status in the urban community, contrarily the father lost some of his influence and patriarchal status and authority. This and the rise in national income increased the income of the individual family from L.E. 250.4 per-family in 1960 to L.E. 303.1 per-family in 1967(1).

Although the general pattern of socialization has little deviation from the traditional pattern, yet in the past twenty years there have been social changes which affect those traditional patterns. The modern family, especially in the urban areas meet, in a more efficient way, the needs of the children, in that it values better education and better health practices. Although the father still has a great amount of power over his family, he plays a more democratic role. He also has more respect of his wife's mentality, an attitude the eastern women has long been deprived of. This is leading to happier family life and the better upbringing of the children.

The Egyptian family has a close working relationship with religion. Although religion is now one of the important courses in schools the family remains the main institution for religious training.

Among some of the family problems of socialization is child discipline. Egyptian mothers are, as a rule, most permissive with children of pre-school age. That means up to the age of 5 or 6 years. After that age the child is severely trained and disciplined. This sudden transition from complete permissiveness to sever discipline often makes the child insecure and lacking in self-confidence. This is perhaps one of the reasons underlying the difficulty Egyptian children find in decision making.

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(1) Office of Census & Statistics 1960. Second Volume. p. 2.

Another of the significant problems of many families in Egypt is that they are, especially in rural settings, unable to meet the developmental needs of the children. This is because of the lack of education of the parents and to insufficient psychological understanding of children and young people. In fact this is a problem common to all developing countries. That is why we are trying to meet these needs through schooling. Efforts are also made to give parents some psychological insight through different means of communication.

A third problem of the Egyptian family is the cultural traditions in favor of the male offspring. Being patriarchal and consanguine in nature the family in Egypt prefers to have a son rather than a daughter and this preference is apparent in different situations. The family may undergo hardship for the sake of the education of a son, but not that of a daughter. That is why many poor families may try to educate the son, but refrain from giving the same effort for a girl. This is the reason why the percentage of educated boys is greater than that of girls. However, there has been a change in that attitude in the last thirty years on the part of both the family and the government and female education has received a real push.

Inspite of the realization of the importance of women's education and the role of the educated women in building the new society, there is still a long way for her to go. She has to wipe out the fingerprints of the dark and dogmatic ideas of the era of Turkish reign. This can be seen in the development of girl's education in the last thirty years as shown in the following table.

Number and percentage of women in different levels of education (1947 — 66)

Level of education	1947 Number of women	%	1960 Number of women	%	1966 Number of women	%
illiterate	5964624	88.2	7539024	83.9	8335290	78.9
minimal level of reading ...	726204	10.7	1125953	12.5	1835332	17.4
below junior certificate ...	52971	.8	101785	1.1		
junior certificate	16801	.2	200698	2.2	359109	3.4
higher certificate	4033	.1	23635	.3	33277	.3
Totals	6764633	100	8991095	100	10563308	100

It can be noticed that inspite of the effort done to educate women there are still about 80% illiterates, and only .3% university educated women. However this dark picture must not bar the brighter side of the problem. We must refer to the progressive outlook of society which inhances the rapid growth of educated women compared to that of educated males. Women in the present society provide a very effective source of manpower in almost all of the higher specializations including, art, law, commerce, economics, medicine, nursing, science, agriculture, education, as well as in other areas.

Expect for the big cities, the problem of mixing the two sexes in the family is one of the most serious problems waiting for a happy solution. Parents do not object to coeducational mixing at the schools and the universities, but they have great objections to such mixing within the home. The young people are not allowed to bring home friends of the opposite sex. This prevents the young people of both sexes from having a better understanding of each other, on the one hand, and, on the other hand, it hinders the efforts of the family for providing youth proper guidance.

The family is also affected by the problems of the working wife, of which the most important is the shortage of nursery schools and domestic help. To meet this problem factories and firms were directed by law to open nursery schools for their female personnel. Although there are growing efforts in this direction there is still a great need of thousands of these nursery schools.

One of the most urgent and significant problems in Egypt today is that of birth control in the Egyptian family. In the last thirty years the birth rate in Egypt has increased to the extent that birth control has become a national concern. One can see that the increase of population in Egypt is really threatering and that we are in need of scientific research in this field in order to deal effectively with the problem.

A research project that is now being carried out in the University College for Girls is an effort to find out some causes of our demographic problem. The research is supposed to answer such questions as : Is there any difference between Moslem and Christian families as far as birth rate is concerned ? How far does the kind of work and level of education of the family members affect birth rate ? Does the number of children in the family affect intelligence as measured by intelligence tests ?

2000 students of the University were chosen, each representing a family. As the students come from the different provinces of Egypt the research is supposed, or assumed, to adequately survey the birth rate in Egypt. A questionnaire was developed to get information about the work of the father, or both parents, address and number of rooms, amount of rent paid for the residence, level of education of both parents, income of the family, number of brothers and sisters, and so forth.

Yet as the full results of the research are not yet available, the information presented here reflects only a small sample of the total families, 700. The birth rate was studied in relation to five categories : number of children in family : 1 - 3; 4 - 6; 7 - 8; 9 - 10; 11 - 12. Out of the 700 families studied only 680 were analyzed after eliminating those where the fathers were deceased. First, in answer to the question concerning the effect of the religion on the number of children, results were :

Number, percentage and level of education for women (1947 — 1966)

No. of chil. / Religion	1 — 3	4 — 6	7 — 8	9 — 10	11 — 12
	%	%	%	%	%
Christians	22.2	41.1	27.7	5.5	3.3
Moslems	11.	52.3	25.7	8.3	2.8

This table shows that the Moslem families have bigger families, 89.1% of the Moslems have more than 4 children, while only 77.6% of the christians have the same number. Also one can note that 22.2% of the Chirstians have not more than 3 children, while only 11% of the Moslems have the same number of children.

Although the kind of religion may be one of the factors responsible for the high birth rate in Egypt, it is not the only cause for a great proportion of both family groups to have very high birth rate. 36.5% and 36.8% respectively have between seven and thirteen children, some of them even have as many as 18 children.

Second, the preliminary data was also analysed to find out the relation between the kind of occupation and the numbers of children in the family. The results are shown in the following table.

Birth rate in relation to occupation and level of education

Number of children / occupation	1—3	4—6	7—8	9—10	11—12	Total
	%	%	%	%	%	
Farmer	9	29.3	32.3	17.6	11.7	100%
Worker	11.3	43.5	34.	7.3	4.	100%
Merchant	13.3	47	24.4	10.2	6.1	100%
Civil serv. (int. edu.)	9.3	59.2	27.2	4.3	—	100%
professional	16.1	60.2	18.6	5.1	.7	100%

From this table it can be noted that the birth rate is very high with regard to almost all kinds of occupations. Approximately 85% in each occupational group have more than four children. The farmers have the highest birth rate, for only 9% of that group have less than three children while 11.7% have more than eleven children.

Taking into consideration that about 80% of the farmers, mostly women, are illiterate, while fathers in professional occupations are highly educated, one might be able to assume that education amay be effective in encouraging birth control, yet we must be aware of the fact that illiteracy or occupation are not the only or even the main cause of a high birth rate.

SOME ASPECTS OF POPULATION GROWTH IN EGYPT

By

Badr Masri Hanna *

One of the most outstanding problems of today in the developing countries is the rapid increase in population which requires increased efforts by the governments to confront the needs of their population. Economic and social planning cannot be soundly effective without taking into consideration the size of population and its prospective structre. I shall try to present some basic features of the demographic conditions in Egypt in terms of structure and needs of different groups of the population. This presentation may give the domographic background needed for studying questions of economic and social development that could not be fully discussed here.

Demographic statistics in Egypt go back to the year 1800 when the population was estimated to be about 2.5 million. The first population census was taken in 1882, and from 1897 a series of decennial censuses was maintained up to 1947. The eighth census was postponed due to certain difficulties and was taken in September 1960. A national sample census was carried out in May 1966 to provide a broad basis of information for different purposes.

TABLE 1

Egyptian Population at Successive Censuses (1882 — 1966)

Census Year	Population in Thousands	Average Annual Rate of Growth
1882	6,809	—
1897	9,749	2.43
1907	11,287	1.58
1917	12,751	1.28
1927	14,218	1.12
1937	15.933	1.14
1947	19,022	1.78
1960	26,085	2.36
1966	30,076	2.54

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Table 1 shows that the rate of population growth in Egypt is one of the highest in the world. It is almost double the rate in the U.S.S.R and U.S.A. and more than double the rate in U.K. and France, The population doubled in 43 years between 1917 and 1960. It will double again before the end of the century if the rate of increase remains at the level of 2.54 which is observed between 1960 and 1966.

This increase was due to the improvement of health conditions and their effect in reducing death rate. It was estimated that the mortality rate varied between 35 and 40 per thousand at the beginning of this century while infant mortality rate reached 400 due to ill health and the spread of epidemics and poverty among the masses. The general death rate showed no sign of improving up to 1940. Mortality from infections and parasitic diseases constituted a substantial proportion of total mortality. The effectiveness of the measures taken by the government to combat these diseases is no doubt striking.

The trend of birth and death rates are given in table 2 below.

TABLE 2

Birth & death rates per thousand population (1940 — 1969)

Years	Birth Rates	Death Rates
1940 — 44	46.8	33.7
1945 — 49	51.0	27.7
1950 — 54	49.5	21.8
1955 — 59	46.3	19.3
1960 — 64	45.4	17.7
1965 — 69	43.7	17.0

Recently death rate has dropped rapidly and it has now reached a much lower level. During the last 30 years the general mortality rate fell from 33.7 per thousand to 17.0 per thousand. Infant mortality rates also declined from 165 per thousand in 1933 - 39 to 118 per thousand in 1963 - 69. The national life tables prepared for the Egyptian population in the census years 1937, 1947 and 1960 indicate a significant increase in life expectancy at birth for males and females.

More impressive decline in mortality will occur with the improving of general personal health and sanitation and expansion of educatioin. Besides, potentials for better control of various epidemic diseases are almost sure to improve as larger portions of rural areas are opened to development.

TABLE 3

Expectation of life at Birth 1937 — 1960

	Males	Females
1937	35.6	42.1
1947	41.4	47.0
1960	51.6	53.8

Past trends of death and birth rates indicate that Egypt is now among the group of countries where the death rate is dropping without being accompanied by a corresponding decline in birth rate and hence this has led to a steady increase of population. Birth rate in Egypt is among the highest in the world varying between 40 & 45 per thousand. This rate is similar to that of most developing countries of today.

Fertility rates in Egypt are considerably high especially at ages 25 — 29. Over twently years the rates of younger women declined while those of older women grew higher. The declining fertility rates among younger women can be attributed to decreasing proportions of married females below the age of 25. Age at marriage rose by 1.2 years within thirteen years (1947 — 60) and it seems to be rising due to the increasing proportion of educated females and the participation of women in labour force. The rapid growth of urbanization will help the family planning programme started in 1953 to be more effective in the next decade.

The future population of Egypt up to 1985 is estimated on the basis of three sets of assumptions about fertility and mortality changes. It is most likely that the future fertility and mortality levels in Egypt will be lower than the present level. In all projections therefore, fertility and mortality rates have been assumed to decline. For the high projection the gross reproduction rate is assumed to decline slightly by about 0.12 units during the 20 years period (1965 — 85). The value of G.R.R. in 1985 is expected to be 2.88 compared to 3.0 estimated for 1965. In the medium projection the assumed rate of decline in the G.R.R. is double that in the high projection. As a result the G.R.R. will decline to 2.75 by 1985. A much faster rate of decline is assumed in the low projection that is from 3.0 in 1965 to 2.50 in 1985.

As far as mortality is concerned, it is assumed that the male expectation of life at birth will increase at the rate of half a year per year till 1970 and thereafter at the rate of 3 years during a 5 year period. The female expectation of life at birth will increase uniformly at the rate of 0.6 year per year during 1965 — 85. According to these assumptions, the expectation of life at birth is expected to increase to 57.0 years for males and 60.5 for the females by 1985. It is estimated that the population will reach 44.458 million in 1980 and 51.439 million in 1985.

As a result of the present combination of fertility and mortality conditions, Egypt has a very high percentage of children below 15 years of age (See Table 4). This situation is not expected to continue by the end of century, but there is every indication that the population will continue to be young during the next 15 years or so as the mortality decline is not expected to be accompanied by a similar decline in fertility. The percentage of children below 15 years of age is about 43% compared to only 26% in the doveloped countries. The present unfavourable age structure is expected to continue for the near future in the sense that the proportion of children will not decrease and the proportion of working ages will not increase. It will be noticed that the percentage of the population aged 15 — 64 is estimated at 54% in 1985 compared to 63.5% in the developed countries. The dependency ratio is estimated at about 85% compared to 59% in the developed countries implying the economic burden on the working population. It is obvious that the estimated increase of the population by 53% within 15 years from 33.627 million in 1970 to 51.439 million in 1985 has to be studied seriously by the planners, in terms of providing the population with its essential needs and raising its level of living. Education, employment and production should be assessed in relation to the anticipated change in the population.

TABLE 4

Population of Egypt by age in the census years 1927 — 1960 and as projected of the years 1965 — 1985

Percentage

Age group	1927	1937	1947	1960	1965	1970	1975	1980	1985
0 — 4	14.4	13.2	13.6	15.9	17.0	16.9	16.9	16.8	16.7
5 — 14	24.2	25.9	24.4	26.9	25.5	25.6	25.7	25.8	25.9
15 — 64	57.4	57.0	58.6	53.8	54.4	54.3	54.1	54.0	54.0
65 +	4.0	3.9	3.4	3.4	3.1	3.2	3.3	3.4	3.4
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The growth of the school age population is of great importance in view of its burden on the budget and its requirement in terms of teacher training facilities. This should go simultaneously with the current efforts for filling in the serious gaps in enrolment and improving the quality of education. The percentage of pupils enrolled in 1950 in the first school stage (aged 6 — 11) was 41% and 17% in the second stage (aged 12 —17) of the population in the relevant age groups. The corresponding enrolment ratio in 1968 was about 78% and 30% respectively. Thus there is a tendency toward a full enrolment ratio in the future at least for the compulsory primary education. Teacher training did not increase at the same rate of growth in the number of pupils. The pupil-teacher ratiio has risen from 29 to 40 during the last 20 years. To maintain the previous pupil-teacher ratio planners of education should take into account the present shortage in the number of teachers in addition to the number needed due to the population growth and the increase of enrolment ratio in the future.

If the increasing trend of enrolment ratio continues in the future to cover the primary school population aged 6 — 12, the projected figures for 1985 will be double the present total enrolment among males and three times among females to reach an enrolment ratio of 92% and 89% respectively.

The Egyptian labour force has more or less the same characteristics as that in the developing countries. The proportion of the total population in the labour force has been relatively low, implying a heavy load of dependency. The significant extent of child and old aged labour manifested itself particularly in rural communities. Despite the high participation rates of youth and aged men, the expectation of working life is rather short.

However, the changing face of labour force is taking place. Education seems to be the most powerful single factor tending to increase female participation in economic activities. Activity rates among young people is declining due to the government policy of limiting their employment and encouraging their education. The reduction of death rates since the Second World War has lengthened the average number of economically active years.

The economy of Egypt will need to meet the challenge of absorbing the anticipated increase in labour force. The process of providing this increase with employment will of course have to be undertaken simultaneouqly with the already existing problems of under employment and unemployment. It is desirable to stimulate changes in the economic structure in such a way as to absorb the increaseing number of economically active population. The Egyptian econamic structure has been dominated by the agricultural sector and it will continue to occupy this position until the industrialization programmes are promoted. The proportion of persons occupied in agriculture was 69% of the total labour force in 1937 and with the expansion in industry this ratio decreased to 49% in 1968/69.

In spite of the tangible development and the continuous growth of agricultural production in Egypt, it is still unable to cope with the rapid growth of population. While the number of people rose by 210% between 1897 and 1966 the cultivated area increased only by 51.5% during the same period. The major problem which the planner has to face in the field of development in this respect is the increased demand for food whereas the local supply is insufficient. This situation leads necessarily to the rise of prices of foodstuffs which may force the government to adopt the policy of fixing the prices of basic products. This unbalanced situation would hinder the economic development unless more attention is directed to other fields.

Since the turn of this century there has been a great increase in the urban population due to the accelerated development in the industrial and services sectors. A study of the last seven censuses reveales that the population of the large cities, capitals of governorates and towns has risen to 40% of the total population against only 19% in 1907. The population of Cairo alone in 1966 was about 4.2 million.

This migration movement from rural to urban areas had aggravated the housing problem in urban areas. Urban housing needs were estimated for the period between 1960 and 1980 taking into account the increased number of households, the overcrowded dwellings already existing and the replacement of old houses. Population growth alone requires 797 thousand new dwellings. The overcrowded population who are at present living in one or two rooms need another 531 thousand dwellings of not less than 3 rooms each. The unfit dwellings amount to 229 thousand on the assumption that the building should be replaced after 60 to 80 years according to the materials of which it was built. The dramatic capital invested in building industry provided by both public and private sectors may not solve housing problems for many years.

During the last 20 years, the State has been duly concerned with the population problem, noting that the rapid growth of population is an obstacle to economic development. In fact the greater part of the national income is consumed in providing the necessities, thus leaving little surplus for savings and investment. It was therefore necessary for Egyptian planners to direct their efforts to reduce the rate of growth of the population and to accelerate the increase of the national income by cultivating new industries.

A national commission for population problems was formed in 1953 to outline a population policy for the country. A very limited number of family planning clinics were established in 1955. In 1962 Official Birth Control Propaganda was launched and a large number of clinics were established both in urban and rural areas where oral contraceptives and IUD's were supplied free of charge.

The National Family Planning Project was started in February 1966 and adopted a ten year programme for family planning aiming at reducing birth rate to 30 per thousand population by 1978. The plan concentrates on the most fertile women aged 25 — 34 as it is expected to give the quickest results.

At the same time the industrialization plan was set in 1957. The first Five-Year Plan included investment of L.E. 500 millions. Another L.E. 435 millions were invested in the second Five-Year Plan. These sums were distributed among the main industrial sectors. The industrialization policy in Egypt conforms with the general policy which aims at increasing the average per capita share of the national income.

It is strongly recommended that family planning should be used to supplement economic efforts. The attempt to reduce the level of fertility through family planning programmes is a long term prospect. People are perhaps quite ready to accept basic health improvement measures that will reduce mortality. Yet, breaking through traditions in fertility behavior to promote reductions in fertility is certainly a difficult task. Education, increased proportion of female participation in the labour force and the growth of urbanization will probably promote a transition to lower levels of childbearing.

Even when growth rates do decline, the effect of past rates of population growth will be felt progressively throughout the age structure for a further period of time in the future. Any growth of population at this stage is particularly significant for Egypt since its numerous needs have to be met simultaneously with the current and future development efforts in employment, education, housing ... etc.

Planning & Modernization :

SOCIALISM AND DEMOCRACY IN MODERN EGYPT
AN ANALYTICAL STUDY

By

Gaber Gad Abd-El-Rahman[*]

One of the undisputable basic facts is that any political regime in any country is nothing but a reflection of its economic system; whether that system is feudalistic, capitalistic or socialistic. If the feudal system, for instance, is the prevailing one the feudalists will control the economic interests and form the political system in the state according to the form which protects their own interests best. One can say the same thing about all other economic systems.

The economic power in Egypt before the Revolution was mainly in the hands of feudalistic and exploitive capitalists. Most of the agrarian land was in hands of a few minority land-owners, approximately 5% of the population possesed 90% of the agrarian land. Above the big land-owners were the members of the royal family. With these there were the foreigners who made their tremendous wealth by exploitation under the protection of capitalistic measures.

The interests of these three groups were interconnected thus there developed alliance among them to protect those interests. Those interests were, in turn, connected to colonialism which found in them the ideal tool to achieve its goals.

The political regime spawned by the above combination was a reflection of the economic system. There was a parlimentary institution based on a constitution conceived as a donation from the King, the Constitution of 1923. It was mainly derived from the Belgian Constitution, for a certain period that constitution was replaced by the 1930 Constitution.

The parties representing these classes and interests were numerous and rule went to the party which acquired the majority in an election. The parties competed for the sake of winning the right to protect and develop the interests of their members. They, however, adopted democracy as a facade to protect their interests of feudalism and capitalism. These parties did not hesitate to declare openly that

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rule should be given to the real owners of interests, that means the feudalists and the capitalists.

The domination of the feudalist capitalist alliance over the economy led to a dedicated rule to serve the interests of that alliance. This was first and foremost and it took no heed of the interests of the masses at large.

If rule by one of those parties came as a result of an election, then those elections are worth examining. The majority of those who gave their votes to the winning party enjoyed no free-will. If they were peasants they were obliged to give their votes to the feudalist according to his will or else they would be driven away from the land which they were toiling. Votes were bought both in the village and the city, and even more, elections were forged sometimes. Those elements combined with the prevaliling illiteracy and backwardness made the secrecy of an election void of any meaning.

The popular organizations such as the cooperatives and the syndicates, which were supposed to be the base popular representation, were incapable of playing their role because they were controlled by the feudalistic and capitalistic forces. The hired and the small landowner did not have the chance to let their voices reach the ruling circles through the cooperatives. The freedom of press was also lost and consequently, thereby, the freedom of criticism, because of the laws of censorship from one side and the subjection of the press by the feudalists and capitalists financing it from the other.

Feudalism and capitalism controlled science, education and culture owing to the prevalence of their concepts within the society. Teachers taught successive generations, for example, that Egypt was an agrarian country and could not be come an industrial one. They spoiled the biographies of the great men and of the valiant militants. History was presented in a form other than its true one. The reactionary forces worked hard to gain the loyality of some of the intellectuals by temptation. Those who did not submit, were attacked and to be forgotten and forsaken was their destiny.

In 1952 the 23rd July Revolution broke out. It was obvious from the six principles it announced that it did not accept either the economic system based on the alliance of feudalism and capitalism, or the political system based on the reactionary democratic system. The six principles pronounced were :

1. ending conlonialism and its agents;
2. liquidating feudalism;

3. abolishing monopoly and the domination of capital over the government;

4. establishing social justice;

5. building a powerful national army;

6. establishing a sound democratic life.

The Revolution was keen to make the new political regime a reflection of a new economic system, that is, the socialist system. After abolishing the feudalistic and capitalistic alliance the Revolution raised a new system, the socialist democratic system; a system that aims at establishing a society of justice and sufficiency, of work and equal opportunity, of production and service, a system that works to assure the sovereignty of the people.

The Revolution did not stick to establishing the new regime on certain ready-made theories, nor to precedents and solutions previously developed in other countries. It inspired its own regime from the cosequences of its own national experiences, the experiences of right and wrong, hence the new regime has emanated from its own peculiar circumstances.

The true freedom which the Revolution has been so hopeful of achieving are both political and social freedom. Without them true freedom can not soar to the horizons of the awaited morrow.

That horizon is a political democracy, a democracy of the working people : peasants, workers, soldiers, intellectuals. It is an alliance of these people with the force of national capitalism as the lawful alternative to the alliance of feudalism and exploitive capitalism. In developing this alliance it was able to solve the class struggle by peaceful means. The Revolution accomplished this by disarming the reactionary alliance, taking its weapons and its means of resistance by extracting the State and the financial authority under its control and getting rid of the traditional alliance of those forces with colonialism.

The multiparty system was based on defending the interests of certain classes while the new regime is aimed at liquidating the distinctions among the classes. Under the new system the people found out that they enjoy certain common interests, primarily their interests in safeguarding the socialist gains, the democratic regime, the sovereignty of law and in combating bureaucracy in the state organs and the public sector. It is these that enabled them to enter into union in one political organisation : « the Arab Socialist Union ». This is the authority which represents the people striving to accomplish the Revolution's potentialities and safeguarding its true democratic values.

In order to enable the new democratic regime to achieve its effecttiveness it was necessary to provide some guarantees. First, to assure 50% of the seats to the workers and peasants in all the political and popular organisations based on free elections.

Second, to maintain that the authority of the elected popular assemblies should be raised over the authority of the executive organs since the source of sovereignty is the people. However, because of special cincumstances the authority of the state should be transferred gradually to popular authorities in local governments. This authority is more capable of feeling the problems of the people and more able to reach conclusions about them.

Third, a guarantee for the renewal and continuation of the march through collective leadership which not only guards against the individual running loose, but also confirms and ensures the reign of democracy in its subtle form.

Fourth, to ensure ownership of the press by the Arab Socialist Union under the Law of the Reorganisation of the Press in 1960, so that the field would became open to the freedom of opinion and criticism. Under this structure the press was not subjected to the control of capitalism, but became the people's own. The press will come to enjoy its complete freedom under « an honour press charater » which is being prepared now and under an organization that will take the shape of « a higher council of the press » which will guarantee the implementation of the ideological and political line of the country.

Fifth, to take care of developing popular organizations, especially cooperatives and syndicates. The development of such movements is « an endless source to the conscious leadership that directly receives the reactions and responses of the masses ».

Sixth, the new revolutionary concepts of true democracy must impose themselves on the factors influencing the formation of the citizen, foremost among which are education and the administrative laws and regulations. The object of education is no longer to turn out employees who work at the governmental offices. Thus the educational curricula in all subjects must be reconsidered according to the principles of the Revolution. The curricula should aim at enabling the individual human being to reshape their life. Laws, must also be redrafted to serve the new social relations brought in by political democracy which reflects social democracy. Moreover, justice, which is the sacred right of every individual, should never be an expensive commodity, beyond the reach of any citizen. Justice should be accessible to every individual without material obstacles nor administrative complications. The government statutes should be radically changed. They were, for the most part, drawn up under the rule of one class. They should be transformed, without delay, to uphold the democratic principles of all the people.

Democratic action in these fields will provide the opportunity for developing a new culture with new values. Such a culture would be profoundly aware of man and sincere in reacting to and expressing the individual. It would then throw light on the facts of his thought and feeling. It would move the creative energies latent in mankind, the efforts of which would in turn be reflected in his experience of democracy, his conception of its principles and his discovery of its real essence.

The application of socialism in Egypt did not take the same course as the it did in other countries where socialism preceded it. Hence, that application came to be distinguished by special distinctions emanating from the circumstance of the Egyptian environment. In order to make socialism achieve its objectives, the Egyptian state did not resort to the idea of limitless nationalization. Rather, Egyptian socialism was based on the necessity of the domination of the people over all the means of production and on directing their surpluses according to a fixed plan. This domination is realised, first, by means of creating a public sector capable of leading development in all fields and, second, by carrying the principal responsibility for the developmental plan. This sector includes : in the field of general production the major skeleton of production operation such as railways, roads, ports, airports, dams, sea, land and air transportation, as well as other public services which should be within the framework of public ownership.

In the field of specific industries it includes the majority of the heavy, medium and mining industries. Although it is possible to allow private ownership in this domain, such private ownership should be controlled by the public sector which is owned by the people. Light industries must always be beyond control by a monopoly. Though this field is open to private ownership, the public sector must have a role enabling it to guide that industry in relation to the people's interests.

In the field of trade foreign trade must be under the people's full control. Here, all import trade must be within the framework of the public sector. Though it is incumbent upon private capital to participate in export trade, the public sector must have the main share in that field to preclude all possible fraudulency. If a percentage could be defined in that field, the public sector must be in charge of three quarters of exports, while encouraging the private sector to shoulder the responsibility of the remaining share. Likewise the public sector must have a role in internal trade. It should be in charge of at least one quarter of the internal trade to prevent monopoly and expand the range of internal trade through private and cooperative activities. It should be understood of course, that internal trade is a service and therefore unreasonable profit cannot be permitted under any circumstances. Finally, insurance companies must be under public control in order to safeguard the national savings as a guarantee for their keeping and achieving effecient direction.

The private sector practices its activities without exploitation. The Egyptian application of socialism has resorted to special means to prevent ownership from being exploitive. In the field of industry it stated a minimum limit for the worker's wage, working hours are seven hours daily. It was further decided that the worker should share in the administrative board and in the profits. The worker is also protected by an umbrella of social insurance and enjoys annual holidays and sick leaves. The worker's cooperative system plays a a great role in this regard as well.

In the field of agricultural lands the agricultral cooperative plays a great role in eliminating exploitation. The Agrarian Reform Laws defined the limit of agrarian ownership in addition to fixing the rent value of the land at a maximum of seven times the taxation. The rent contract is renewed automatically if the peasant fulfills his obligations. A fixed minimum limit for the wage of the agricultural laborer was established.

In regard to buildings, laws were passed to fix their rent value and progressive taxation was introduced to play its role in limiting exploitation. Cooperative housing is accomplishing a similar goal.

In the field of trade the price-ceiling establishes the reasonable profit margin. The governmental consumer stores and consumer's cooperatives are taking a good share in the struggle to abolish exploitation.

Egyptian socialism does not believe in the domination nor the dictatorship of one class. Some socialitic regimes have believed in the dictatorship of the prolitariat in order to transfer the society from capitalism to socialism then to communism. Egyptian socialism after abolishing the dictatorship of feudalism in collusion with capitalism, laid the burden of transformation from the old to the new on the shoulder of the alliance of all the people's working forces, which gathers together peasants, workers, soldiers, intellectuals with national capitalism.

Socialism in Egypt has been careful not to sacrifice the present generation for the sake of the coming ones. In order to accomplish that it has had to solve a difficult equation which consists of 3 branches.

1. how can we increase production,
2. at the same time increasing consumption in goods and services.
3. and to do that side by side with an increase in savings for new investments ?

For that purpose Egyptian socialism has worked hard to increase production continually so as to provide the real equality of opportunities for all citizens. That equality referred to here is that which is achieved through the right of every citizen to proper health-care, to education as far as his capacities and talents can bear, to finding work that suits his effeciency, ability and the education he possesses and to enjoying insurance against sickness and old-age. While some socialisms have called for internationalism, we have raised the slogan of « Freedom, Socialism and Unity », the slogan which we struggle hard to realize. It is our belief in Arab nationalism.

Last, our socialism is based on religious spiritual values. As the National Charter states : « The freedom of religious belief must be regarded as sacred in our new free life.

The eternal spiritual values derived from religions are capable of of guiding man, of lighting the candle of faith in his life and of bestowing on him unlimited capacities for serving truth, good and love. In their essence all divine messages constitute human revolutions which aimed at the reinstatement of man's dignity and his happiness. It is the prime duty of religious thinkers, then, to preserve for each religion the essence of its divine message.

The essence of religion does not conflict with the facts of our life; the conflict arises only in certain situations as a result of attempts made by reactionary elements to exploit religion against its nature and spirit with a view to impede progress. These elements fabricate false interpretations of religion in flagrant contradiction with its noble and divine wisdom.

All religions contain a message of progress. But the forces of reaction, desiring to monopolize all the goods of the earth and use them to serve their own selfish interests alone, committed the crime of attaching their greed and cupidity to religion and of reading into it something that contradicts its very spirit with the object of stemming the current of progress ».

The Permanant Constitution of the Arab Republic of Egypt was issued after the rectification movement led by President Mohamed Anwar El Sadat on 15th May, 1971. It states that Egypt is an Arab Republic with a democratic socialist regime based on the alliance of the forces of the working people.

It states as well that sovereignty is only for the people. That they are the sources of all authority and that the people will defend this sovereignty. The constitution emphasises the role of work, economic planning and lays down the economic socialist imfrastructure based on efficiency and justice which prevents all shapes of exploitation. It also aims at liquidating distinctions among classes, assures the people's control over all means of production and specifies the share of workers in directing projects and enjoying their profits.

The constitution assures a role for the public sector, as well as the cooperative and private sectors and protects each of them by laying down the necessary guarantees for that. Land ownership is limited to a degree that guarantees the protection of the peasant and the agricultural laborer from exploitation.

It emphasizes the importance of the working movement in enhancing economic development and progress. It protects public and private freedom and to assure them the constitution stresses that the socialist legitimacy is the basis of all relations and that the sovereignty of law is the basis of all rule. The independence of justice is an essential guarantee for the protection of all rights and freedom.

The constitution provides special protection of citizens' freedom and guarantees for their enjoyment of their private lives. It stresses that personal freedom is to be an untouched basic right. No body is to be arrested or searched, either in person or in his home or to be imprisoned or restricted in his personal freedom. No restrictions are to prevent his movements unless there is a judical oredr.

Any attack on these freedoms is considered a crime that neither a criminal nor a civil suit can void by prescription. The State, thereby, is obligated to provide just compensation for the person who is subjected to such an attack. The Consitution further points out that the Socialist General Prosecuter is the authority which takes the measures that ensure and guarantee to seeing that the people's rights, the safety of the society and its political regime, are safeguarded to protect the socialist gains and to maintain adherance to socialist conduct.

To conslidate the base of the democratic socialist regime, President Sadat presented the National Work Program to the General National Conference of the Arab Socialist Union in its first session on 23rd July, 1971. The program aimed at doubling the national income and building the modern state. That State is distinguished by what the President stated as follows :

1. It is a state of free men, pround of their homeland, proud of their dignity, confident of their day, their morrow, and the future of their children.

2. A state of the people's working forces, the makers of history of the present and of the future, rather than a state of the minority, of the select, or of the privileged elite.

3. A state of popular institutions composed of free individuals.

4. A state where no exploitation of man may exist, where no contradiction between the individual and the society may exist, and where no advanatage for any man over any other may exist except through work.

5. A state which is not statisfied with just importing some of the achivements of modern science, but rather building one in which the personality and culture of man can flourish, his knowledge be diversified, his abilities soar unfettered enabling him to establish, by himself and on his soil, the achievements of science.

6. A state consecrating all that modern science has achieved for the benefit of society, so that life becomes a pleasure rather than a hardship, a process of continous creation rather than a boring repetition, a human mission not just an individual means to gain livelihood.

7. A state where there is no place for illiteracy.

8. A state where unemployment vanishes forever, where a dignified opportunity for work is provided for everyone of working age, where consecutive increases of income, rise of culture and knowledge, improvement of living conditions, extension of all types of services, easy opportunities for the enjoyment of leisure times, and compensating insurance against disability and old age are ensured for all workers whatever their position in the building process may be.

9. A state based on ever developing technology in order to increase production, in quantity and in quality, at an increassingly rapid rate of development, so as to increase the national income at a rate exceeding that of the population growth.

10. A state of industrial complexes, which link the place of work with the housing area, and provide workers with the best working conditions, in accordance with the most modern methods, and also the most comfortable housing conditions.

11. Last, but not least, a state of modern villages which provide every farmer with modern, healthy housing, supplied with water and electricity, which easily and without any exploitation, supplies him with health, cultural and recretional services, and which reduces the hardship of his manual work by supplying him with machinery.

The new state is a state where the farmer will feel that he is a farmer and a citizen not inferior to the inhabitants of the town. This can only be accomplished by establishing new human and social relations in the countryside. The establishment of such relations is connected with rural industrialization, agricultural mechnization, and building new planned villages in which healthy housing units, medical treatment, sports playgrounds, and the means of culture and recreation are provided.

All these matters are not beyond our capacity, following the construction of the High Dam, and the electricity it supplies and following the erection of the iron and steel complex, together with the building tools and industrialization which it will produce. All we need is orgainzed work determination and faith in the cause.

The Charter stipulated that to raise the village to the urban level is not only a necessity implied by justice, but a fundamental necessity among the development requisites. Dissolving the difference between the village and the town and between the farmers and the workers, who together represent the axis of the alliance of the people's forces, should be a fundamental objective for development.

These differences are an inevitable result of the long years of backwardness imposed by the alliance of imperialism and feudalism. The Revolution essentialy broke out to abolish, for ever, all the effects of backwardness and deprivation. The responsibility of village development and agricultural mechanization is not imposed on the rural population or institutions alone, but it falls also, and to a larger extent, on industry and the central organs.

PLANNING FOR DEVELOPMENT IN EGYPT

By

Imam Selim *

Most of the developing countries have developed over-all plans to translate their national policy into action. Those plans are formulated within the political trends prevailing in each country. Therefore, national planning agencies have been established and national plans are appearing in different countries in different forms. A period of five years seems to be the generally chosen period for planning, although other periods are to be found. The contents of a national plan vary from being simply a list of the proposed projects to be financed from budgetary sources, to more comprehensive plans which include defined economic and social targets.

In developing countries (countries which are struggling to remove economic and social stagnation which goes back centuries) the situation calls for an induced economic growth to utilize the natural resources and develop the social and economic factors in the society. Economic progress alone is not sufficient but political and social changes in certain directions have to take place, both as prerequisites for economic development and as a result of it.

Desired action in economic development can easily be defined in terms of physical and monetary units of production and consumption, while social objectives can only be indicated in general terms. However, the latter is equally important. This means that there is a great need to have measures and indicators for social development. Without those social measures, economic action may go wrong in producing the expected results.

National planning should, therefore, make use of social science theories and studies so as to build up a recommended set of actions to be undertaken by the state and by the citizen. Technical advice from economists, sociologists, educationalists, engineers, etc., has to come in time and in form suitable for decision-making by the authorities.

National planning in Egypt was started by the National Planning Committee which was founded in 1956 as an advisory body to the

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(*) Undersecretary of State, Ministry of Planning.

President of the Republic. It is entrusted with the study and preparation of national, comprehensive plans for economic and social development, and the subsequent follow-up and evaluation of such plans. The committee, therefore, as a study group, has no executive power over ministries or other government agencies. It does not initiate general policies nor formulate projects, but only receives from public and private authorities complete information about their proposed projects and policies of development.

The committee has studied the general economic and social course of development in the years before 1960 as indicated by statistical data and other recorded information. Directives of national planning are determined by political authorities, and are assumed in a democratic system to express the desire of the people and their will for development. It is the task of the planning machinary on the local levels, regional levels, and in the specialized ministries and agencies to translate those directives into a set of actions.

The Committee of National Planning became the Ministry of National Planning, keeping the same functions and responsibilities. It is split into 12 main divisions each composed of experts and researchers, whose task is to keep the Ministry well informed of the national situation in specified fields. In addition to these divisions, many study groups were formed. For example, the National Accounting and National Income Group prepares reconds showing year-to-year activities of the different sectors of the economy. A second study group is concerned with the analysis and appraisal of the projects of development in the different branches of the economy together with the suggested means and policies of implementation. A third group studies the structure of the economy in its present from, as well as in the form proposed by the plans. Those groups embrace people of knowledge, experience and science from the different sectors and universities so that a plan is the result of the joint efforts of many different schools of thought in the nation.

Through studies and discussions a need has been felt for social research that could not be accomplished by the planning staff. Thus it has been found advantageous to gain benefits from the efforts of social research institutes, universities and other organizations who supply the available data.

There are continuous efforts in the Ministry of National Planning concentrated on the accounting of national development. This means that figures about production, consumption, export, import, savings and investment are collected. For example, material balances for about two hundred principal commodities and services have been established for each of the five years before 1960 and for the last two five year plans and also for the present ten year plan. Besides the balance for each commodity or service, the source of production and the different uses are indicated. An input/output table, composed of 191 sectors, has been established and smaller tables have been derived and used to estimate outputs needed. Technical input coefficient, labor/capital ratios, and the capital output ratio for the most important sectors of the economy have been obtained from the factual data of the last five year plan. Long term series for agricultural production, foreign trade and for public financing are also established and used in econometric analysis. A general review of the main features of development in the last twelve years and the sectorial growth since the Revolution of 1952 have been recorded. A complete set of projects in agriculture, irrigation, industry, transportation, communication, trade and services has been arranged according to priorities and kept up-to-date by periodic revision. The necessary framework to record economic and social activities is already available and it is hoped its use in a continuous manner will give a better picture of the measurable social and economic activities in the country. Since more attention is to be given in the future to analytical studies, it is hoped that social research, in addition to economic research, will contribute toward our understanding of the detailed mechanism of social evolution.

In agriculture, Egypt has a long and traditional means of land use because agriculture production depends almost completely on the water of the Nile, chanelled and used through a most integrated and exacting control system. The industrialization of agriculture within the framework of the rigid system of water allocation and the practice of continuous cultivation of land all the year round depends on having new ideas accepted by the farmer. To obtain this acceptance requires that the value system which has existed within this given culture be changed by means of planning for social development.

Industry, on the other hand, is a setting totally different from agriculture. It is of a more recent origin than agriculture, and has a quicker pace of development. Social planning for industrial development deals with the training of workers and managers, directing the attitudes of investors and molding the demand of the consumer. It is usually stated that urbanization is a problem closely related to industrialization, but the problem of urbanization in Egypt is equally related to aspects of general development in the country.

As regards transportation and communication, it is noted that the Niles as a water transport system, with the prevailing north wind and the north bound strong current, has afforded, since the Ancient Egypt, the means of establishing order and law and in developing the Pharaonic civilization. Modern means of transport and communications in Egypt have made it possible to continue this tradition of social homogeniety and solidarity. Unified language and culture have helped to maintain uniformity. The geographical location of Egypt, both in ancient and present time, has made it a crossroad of world trade and an interacting civilization. Certain social attitudes of tolerance and understanding have developed. Racial and color discrimination are rare.

Furthermore, social uniformity and non-discrimination, in addition to religious factors, have made it difficult for class-distinctions to be established. Income or authority distinction naturally is to be found, but the physical environment and sociocultural factors have facilitated social interaction, custom interchange and cultural assimilation, and thus have increased social cohesion.

In conclusion, it is felt that this brief review of planning development in the different branches of economy and social services suggests the need to increase the knowledge of the potenialities and tendencies of the present society and to assay the most likely attitude and changes in the coming years of national development.

HEALTH PLANNING IN EGYPT

By

M. Lotfy Dowidar [*]

A definition of health planning was given by the World Health Organization Expert Committee on Public Health Administration (W.H.O. Fourth Report, Series No. 215, 1961, p. 4) in the following terms :

« The planning of public health services means the careful, intelligent interpretation and orderly development of these services, in accordance with modern knowledge and experience to meet the health needs of a nation within its resources ». In another report on national health planning in developing countries, published in 1967, it is stressed that national health planning should be conducted within the following considerations, first, as an integral part of the general social and economic planning of the country and, second, should include provisions for professional personnel from the political sciences, the medical sciences and the social sciences. Third, planning should be a multidisciplinary undertaking in which the different disciplines cooperate in organized team-work, preparing a plan that is acceptable to the government and will have that financial and administrative support for its implementation. Fourth planning should be a continuous process, in need of continuous evaluation and modification.

Public health planning in countries in which planning is carried out at the national level constitutes a scientifically based system of state and social measures; which make it possible most fully to watch the needs of the population for medical care and sanitary-epidemiological services to the economic resources available for the satisfaction of these needs(1).

Interest in health planning has increased markedly over the last 20 years. This is largely the consequence of the increased interest of governments in planning for economic and social development as a whole and as a means of achieving the systematic deployment of

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(*) President of Alexandria University.

(1) World Health Organization. Technical Report Series, No. 350, 1967, p. 13.

national economic and manpower resources. Nevertheless, health planning is also possible in countries in which planning on a national scale does not exist. It is clear that in such countries the difficulties encountered by planning teams will be much greater than those met with in countries like the U.S.S.R. where the economy is fully planned. This does not mean that in countries where government health planning is not obligatory, the medical service may be better than in countries with governmental planning; a higher social or economic status may be the reason.

A general appreciation of the fact that ill-health, and disability are serious handicaps to the development of the economy and the losses they cause can be reduced by measures to safeguard the health of the labor force, is one factor increasing interest in health planning. Another factor is the cost of promoting and operating a system of health service which is now so great as to be beyond the resources available to voluntary agencies or private bodies, so that the trend is now toward increasing government intervention in this field.

The methods of epidemiology, which have proved so successful in the control of the communicable diseases, are being increasingly applied to certain non-communicable diseases such as cancer, cardiovascular diseases, chronic degenerative diseases, accidents, metabolic diseases, among others.

With advanced civilization and development, the material and cultural needs of the population are increased including the various forms of medical care. The state of health care which was accepted and regarded as satisfactory in 1930, is not acceptable in 1972.

Although health services can contribute to economic and social development, not all these services contribute to economic objectives. The care of the old, the disabled, mentally or physically, is now a right of the people, but it does not serve any economic gain. Only a government through a legislated health plan can achieve that.

For planning health services there should be some indices to measure the level of the health of the community concerned, the medical care facilities and the personnel available to it. Three groups of indices are necessary.

First, those indices associated with the *health status* of persons, and populations in a given area (vital statistics).

Second, those indices related to *physical environmental* conditions having a bearing on the health status of the area under review, ecological indices of rural or urban areas, and of the nature of agriculture and irrigation, sources of water supply.

Third, those indices concerned with the *health services* and activities directed toward the improvement of health conditions, for example, the availability and use of hospitals, their levels and efficiency, the number of doctors and specialists and their distribution.

The most generally used index of medical care provided to a community is that which expresses the number of medically qualified personnel per 1,000 or 10,000 population. In the U.S.S.R. there are 26.6 doctors for each 10,000 people, whereas in France, it is 10.9 doctors. It could be said that the medical service in U.S.S.R. is better than in France, but this alone is not sufficient to give a true index. There should be other indices about the proper distribution of these doctors, their standards, and the amount and type of work they do.

A more complete and objective expression of the care provided is obtained by analysing the indices of the available care in outpatient establishments, poly-clinics, hospitals, sanatoria, health resorts and research centers. Consideration is given to the availability of sanitary and epidemiological services. The number and distribution of the nurses, para-medical personnel, auxiliary personnel and qualified hospital managers, must be considered. The number of medical schools, the curriculum of medical education, number of under-graduate and post-graduate medical students, can form another index.

All of the preceding are called specific indices, and the system of indices used in health planning must be constituted by the sum total of the interrelated statistical indices, which express the overall development both of public health as a whole, and its various individual sectors. The values of some, or all of these, indices may be specified by the planning agencies, or they may be embodied in legislation, as in the U.S.S.R., regarded as the target to be achieved. It is inadequate to rely on one index only.

Since the available resources are usually limited at any given time, or over any given period, it is not possible for health authorities to solve simultaneously all the problems that confront them. One of the prime factors of health planning is to select priorities in such a way that an appropriate balance is maintained between the various forms of medical and sanitary care. It is clearly evident that the allocation of priorities is necessarily closely associated with the aims of the health plan.

Many countries use what may be broadly called *economic principles to establish priorities.* The emphasis on prevention rather than cure is one such principle. The cost of curative services for a disease can be saved if the incidence of that disease can be reduced; or if it can be totally eradicated. Second, the common emphasis on saving the lives of younger people in whom there has been considerable social investment and who still have major contributions to make to production represents another choice. The choice of diseases that can be prevented at relatively low cost rather than those that can be prevented only at high cost is a third type of decision with an underlying economic nature. A fourth example is the decision to provide somewhat better health services in areas for occupations where skilled manpower working hours are of great value to the economy.

The fact that public health can make a contribution to economic development does not mean, however, that it is to be regarded purely as a branch of economics and that health services should be concerned exclusively with increased production. Public health is essentially humanitarian in character and its function is to satisfy the needs of human beings for a healthy life. Health sciences contribute to other aspects of human welfare that are very real however hard they may be to measure.

Of all the factors that are required before a health plan can be formulated, none is more important than that on the *level of the health of the population.* Since health itself is not easily measured, the level of health in a community is usually expressed in terms of the nature and extent of the diseases that are prevalent within it.

It is essential to prepare forecasts in order to draw up health plans for short or long periods. Rapid scientific and technical progress makes it impossible to give reliable forecasts for 30 to 40 years ahead; but experience has shown that 10 to 15 years are necessary for a discovery to pass from the stage of fundamental research to practical application. Even so, forecasts for that period of time may be erronous.

Health planners must also be aware of the various aspects of research and advances which may reflect on the future of the health and resources of the country, whether these advances are on the national, regional, or world level. Health plans are often made in may variants based on pessimistic, optimistic, or intermediate assessment of the situation.

The term medical manpower or health team manpower refers to *all the personnel implicated in health service:* doctors, specialists, research workers, nurses, technical assistants, auxiliaries, hospital managers and medical educators.

Referring to doctors as the most important element in health team manpower, data should be studied from 3 points of view :

1. *Availability of physicians :* as expressed by doctor-to-population ratio; also known as the medical density. This data is studied in its absolute form, or divided and analyzed in the various specialities.

2. *The distribution of doctors :* among the various regions of the country rural, urban, big towns, small towns, outpatient doctors, hospital service, private doctors and doctors involved in research.

3. *The utilization of doctors* as expressed by *the work-load* : (the number of hospital beds per occupied post).

These three aspects of study should also be applied to the other members of the health team.

Doctor-population ratio : (World Health Organization 1971).

USSR	1/450 (i.e., one doctor for 450 persons)
Italy	1/570
Canada	1/880
Japan	1/920
U.S.A.	1/1,030
Egypt	1/2,200
India	1/4,830
Indonesia	1/27,560
Ethiopia	1/65,380

In the USSR in 1968, the relative distribution of health workers was : doctors 15%, para-medical 40% (including nurses), auxiliary 30% and others 15%. Sixty per-cent of the total doctor population were outpatient doctors.

Since the application of the socialist system of governing in Egypt and particularly in the last 10 years, health services have undergone drastic changes as a result of a number of points. This taken for granted now that health care and medical care are *the rights of every Egyptian.* The National Charter of 1962 stipulates that equal opportunity which is expressive of social freedom, should be dedicated to the right of every citizen for health welfare in such a way as to ensure that this welfare should not be reduced to a mere commodity subject.

That the adoption of planning as a tool for developing and improving health services within the frame of the overall national socio-economic plan for development should be an accepted task. Planning machinery for health was established at the national level in the form of a « Supreme Council for Health Services » in 1966.

Great stress and importance was given to the *rural sector of the population*. Studies are being made to rebuild Egyptian villages and to re-plan and re-develop all their aspects including the rural health services. With the inception of the local administration act, No. 124, 1960, a decentralized organization replaced the original centralized one. It thus became the responsibility of the local councils to implement the health policy and plans set up by the central policy making and planning machinery. Decentralization entailed the creation of a health zone in each governorate called the Directorate for Health Affairs, headed by a general director who is assisted by a number of specialists for the various branches of health service. The country is divided into 25 governorates, and each governorate is divided into districts. In total, there are 140 districts. So, the system of health service now can be described as being based upon centralization of policy making and planning and decentralization of action and implementation.

The Goals of the Egyptian health plan include : the general development and expansion of health and medical care to cope with expected expansions in other sectors, and expected population growth; adequate provision of health services in rural areas at a level of one rural health unit for every 5,000 people living in a locality not exceeding 3 kilometers in diameter; prevention and control of endemic and communicable diseases; raising the standard of knowledge and experience of the personnel working in the field of health throughout the country by the conducting of training programs, local academic missions to universities and fellowships abroad; promoting and propagating means of health education to the public; promoting the development of the nursing profession, the paramedical professions, the auxiliary medical personnel, the class of administrators, specialized hospital services and statisticians; promoting medical and operational research in the field of public health and sanitary engineering; developing drug manufacture to achieve self-sufficiency in drug production to cope with the rising needs of drug consumption; sustaining a look at the laws, rules, and regulations of work to ensure continuous reform and simplification of procedures and to ensure compulsory health insurance to all laborers; mobilizing the efforts toward implementing the programs of emergency service during the present war time.

Generally speaking health service in Egypt is provided through 3 systems. First, by free health services rendered by the Ministry of Health and the university hospitals. Second, by health insurance services extended by the General Organization of Health Insurance. Third, by private or paying medical care rendered by the state curative organizations of Cairo and Alexandria, some University Hospitals and the private sector.

There are five levels of general medical services at present in Egypt.

The basic or first level is the *Rural Health Unit* in the villages and the District Clinics in towns and cities.. They are planned so that each unit will serve about 5,000 people. There are 4062 villages in the country, and the population of each village fluctuates between 2,000 and 10,000. It is estimated that the 5,000 citizens served by such units must be living within a radius of three kilometers from it. At present we have 1,250 such centers each serving an average of 8,000 people. We need now about 7,000 such centers. The plan is to finish 200 clinics yearly. The services rendered are outpatient services, child care, preventive, school-health, family planning, registration of births and deaths, health education and so forth.

The second level are the health centers combined units. Each should serve about 15,000 citizens. In 1971 we had 600 centers and units. These offered in-patient service in form of a small hospital of 15 - 20 beds. There is also outpatient, dental and maternal and child care services offered.

The next level offers district hospitals. Each has a capacity of 100 - 200 beds. There were in 1971 140 hospitals. Specialized care and treatment are practised at these institutions. General hospitals are located in the capitals of the various Governorates. There are 24, each with a capacity of 300 - 500 beds. These are highly equipped hospitals having all the hospital facilities and all the specializations in medicine.

The last level are the highly specialized hospitals or institutes. These include university hospitals, hospitals for cancer, cardiovascular diseases, orthopedics, nutrition diseases, diabetes, pediatrics, mental diseases, fevers, chest diseases, sanateria and insurance hospitals.

Number of Beds/Population (W.H.O. statistics)

Country	*Beds/1000 population*	*Country*	*Beds/1000 population*
France	15.6	Kuwait	6.7
Sweden	14.0	Isreal	6.0
England	10.0	Yogoslavia	4.0
Japan	9.1	Egypt	2.07
U.S.A.	9.0	India	0.5
U.S.S.R.	8.0	Pakistan	0.4

Distribution of Beds among Sectors in Egypt

	Beds	**Ratio**
Ministry of Public Health (M.P.H.)	51.917	73.1%
University Hospital	8.347	11.8%
Health Insurance & Curative Organization	5.788	8.2%
Other Government Organizations	1.475	2.1%
Private	3.405	4.0%
Total :	70.932	100%

MAN POWER

Doctors :

Total number in 1971 was 17,000. This makes a ratio of 1 doctor for each 2,200 citizens.

Medical Students :

We have seven medical schools. In 1970 we graduated 1,500 doctors (M.B.B.Ch.) and 908 post — graduate doctors, Diploma, Master, or Doctorship. We are nearly self-dependent insofar as post-graduate training in medicine is concerned. The staff to student ratio in our medical schools is about 13/1. The total number of medical students was 19053 in 1970.

HUMAN SETTLEMENTS IN THE NEWLY RECLAIMED AREAS OF THE A.R.E.

THEIR DESIGN AND DEVELOPMENT

By

Salah Al-Abd *

The rate of population growth in densely populated countries is an important element in the complex of social and economic factors affecting people's welfare. In such countries it is not easy to extend the area under cultivation or to increase the yield per-unit of labor. Under such circumstances, population growth may stand as an obstacle to economic and social development(1).

During recent decades Egypt has witnessed rapid rates of population growth. Its population, recorded at 10,342,000 in 1901, increased to 20,871,000 in 1951, 26,650,000 in 1961, 30,121,000 by 1967 and was registered at 33,422,000 in 1970, it is expected to reach 41 million by 1981. Between 1901 and 1921, population increased by three million and by three million seven hundred thousand between 1921 and 1941, from 1941 to 1961 it registered a growth of nine million. The population is further expected to increase by 15 million during the two decades ending in 1981.

Population pressure on the land in Egypt is tremendous when one considers that only a minor part of the country's total land area is cultivable. Of a given total area of 1000 square kilometers, only 24.5 square kilometers, or about 2.5 per cent of that total, are under cultivation. The population density is 1,064 persons per-square mile of cultivated land(2).

A result of the high rate of population growth and the limited agricultural potentialities, intensive urbanization has taken place over the past 25 years. In 1882, the urban population of Egypt was 19 per-cent of the total population. By 1927, it had climbed to 23 per-

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(*) Under Secretary, Ministry of Land Reform.

(1) Monroe Berger, *The Arab world Today*, pp. 11 — 13.

(2) All the above statistical information concerning population was taken from « Population Growth and Development in the UAR, 1966 ». Central Agency for Public Mobilization and Statistics (in Arabic).

cent. By 1947, it had risen to 31 per-cent. In 1960, the urban sector of the country made up 38 per-cent of the total population; in 1970, the percentage reached 42. Accompanying this rapid growth of the urban sector are a host of basic social and pathological problems which further complicate the country's efforts at development.

Egypt has attempted to meet this problem by various industrial and agricultural development schemes as well as by a program of family planning. When Egypt's first Five-Year plan, 1960 - 1965, was adopted, its most widely proclaimed objective was to double national income in a ten-year period. This plan and the second Five-Year Plan, 1965 - 1970, focused on both agriculture and industry. In agriculture, the plans' principal objectives were to increase land productivity as well as cultivated area. The industrial objectives of the two plans emphasized the promotion of local industries in order to reduce the import of industrial commodities while providing new employment opportunities.

The main objective of land reclamation schemes in Egypt is the expansion of agricultural and industrial output. The expansion of agriculture raw materials will affect, both directly and indirectly, the industrialization of the country. Through industrialization the country hopes to replace imports with domestically manufactured goods thus saving the country foreign exchange while at the same time expanding its export of such products in order to further improve its foreign earnings. By reinvesting the earnings gained through higher production on the newly reclaimed land into farms, in the form of livestock, improved seeds, fertilizers, mechanization, fences, and so forth, a great contribution will be made in the form of induced capital and a general expansion of the national income.

Horizontal agricultural development in Egypt will expand agricultural output so as to meet the higher demand for food as well as to provide productive employment for the country's growing population. Urbanization in itself is no answer; endless problems are caused by transforming an unemployed farmer into an unemployed town worker, or by transferring him from a rural slum into an urban slum. The cost of transfer is in the form of additional housing, water supply and drainage. Here the social costs are high; therefore, the bulk of the growing population must be absorbed into agriculture.

Another objective of land reclamation and settlement in Egypt is to encourage and support the creation of institutional structures promoting community initiative and encouraging locally directed growth in the form of cooperatives, community councils and women's organizations. Organizations such as these are the main vehicles for the introduction of social change, the development of positive social attitudes, the creation and organization of new institutions and services and the growth of a community spirit of self-help.

Egypt's land reclamation and settlement program consists of several related projects which, in the aggregate, cover a wide area of land. The larger the size of the projects, the greater the planning requirements, and consequently, the larger the problems involved in satisfying these requirements. Three examples of land resettlement schemes are : the Abis resettlement scheme, an example of settlement on reclaimed land where the main objective is the horizontal expansion of agriculture; the rsettlement of the Nubians, in Kom Ombo, an example of a forced resettlement including the transferral of entire communites as a result of the construction of the High Dam; the Northwestern Desert scheme, an example of resettlement of nomadic and semi-nomadic populations with the aim of creating more viable and closely integrated communities.

Abis(1) was built in a section of Lake Mariout which was formerly a shallow salt water depression three metres below sea level. In 1948 the government began a partial draining of this lake and by the end of 1954, 1,000 acres were reclaimed. Abis is a part of Beheira Province and is located eight kilometers southeast of Alexandria.

The Egyptian-American Rural Improvement Sevrices (EARIS) was established in 1953, to deal with land reclamation and with settlement of that area. Between 1954 and 1962, a total of 21,283 acres were reclaimed, out of which 16.018 are presently under cultivation(2). The total cost of reclaiming that area amounted to LE. 2,074,682(3).

The project involves the construction of nine villages. The basic settlement unit in Abis is a village of some 200 houses, each village is occupied by about 1000 people. One out of every six villages is classified as a basic village serving as a service center for the surrounding satellite villages.

The basic village includes various public buildings, a number of farm houses and 13 additional housing groups containing farm houses only. The housing units are built on the edges of the farms. The basic villages are expected to grow since they serve as administrative centers where cooperatives, banks, intermediate or secondary schools, a hospital, a mosque, veterinary unit, post and telegram office, are located. Between 1954 and 1966, the construction of eight basic villages was completed.

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(1) Compiled form EARIS administrative reports, 1960.

(2) Alvin Lackey, Unpublished Report, 1960.

(3) Helmi Ragheb, Unpublished Report.

The settler's house consists of one or two floors. The one-floor house has two rooms, a kitchen, bathroom and hall. The kitchen includes an oven, a small storage room for keeping household supplies and utensils, and a separate area for livestock and poultry having an independent door and courtyard. The two-stories houses consist of one room, a small storage room and a staircase to the second floor where two additional rooms are located. This house also includes an area for livestock with an independent door.

Land was distributed at a rate of five acres per-settler. A pregnant cow, a house and a small subsidy were given to each family. For residential purposes, the members of each group were settled within the same blocks to assure that they would not feel like strangers within their own community.

Though the per-acre cost of reclamation and cultivation amounted to L.E. 90, the average value per-acre at present is about L.E. 500. This shows that the cost of reclamation is relatively low when compared with capital investment, a stituation which is unique in that particular area because of the nature of the soil which is muddy and contains burned dry seeds and green manure. The average net anual production gain per-acre reached L.E. 90 in 1971, which is very high in comparison to production in neighboring areas.

Agricultural cooperative societies have been set up, one for each 300 settlers, to deal with the provision of agricultural prerequisites as well as for the marketing of agricultural products. The executive members of these societies represent the foundation for the evolution of a solid democratic way of life in the new villages where ach settler is conscious of his role and plays it actively.

The Abis settlement area is characterized by integrated social and economic planning which provides for three distinct services :

(a) The coordination of various settlement activities through the Abis Coordinating Board, which represents the local departments of Health, Agriculture, Education and Social Affairs.

(b) A well-woven net of commercial services including irrigation, land development, communication and marketing services.

(c) The provision of basic social institutions such as schools, hospitals, houses and extension service units.

The effectiveness of the Coordinating Board is limited as a result of the conflicts arising from vested departmental interests. Commercial services were provided in the plans but their timing was seldom synchronized.

The construction of the High Dam and the creation of Lake *Nasser have resulted in the submergence of all Nubian communities* along the Nile between Aswan, Egypt and the Dal Cataract in northern Sudan, a distance of some 500 kilometers(1).

In 1963, these communties had to be relocated into new settlements, one of which is now near Kom Ombo, 50 kilometers north of Aswan, and another at Khashm El Girba, 400 Kilometers east of Khartoum, Sudan. In each country, the resettlement scheme involved the transfer of approximately 50,000 Nubians and included development programs aimed at improving their physical, economic and social conditions.

In 1960, a committee(2) was formed under the supervision of the Governor of Aswan to help settle Nubian problems. The committee held monthly meetings with Nubian delegates until the time of departure. Furthermore, members of the government's staff spent several months moving along the Nile discussing the resettlement problem. The overall responsibility for Nubian resettlement was assigned to the Governor of Aswan, thus making the Nubian resettlement an integral part of the decentralization program for the economic development of Aswan Province.

In 1961, the « Joint Committee for Nubian Migration » was formed under the chairmanship of the Under-Secretary of the Ministry of Social Affairs and was composed of representatives from other concerned ministries. The main function of the Committee was to organize the move of the Nubians to the new sites and to make plans for their resettlement.

The resettlement plan included three stages : resettling of inhabitants of Nubia; providing housing and social services for the members of the Mughtarabeen group who wished to join their families; compensating them for the loss of their properties. The government surveyed the agricultural land of the Nubians, their palm trees and houses. It estimated the amount of compensation for each person on the basis of the data recorded in the survey undertaken in 1960. The Nubians were further consulted on the desired type of compensation. The majority preferred cash. Half of the individual compensation was paid in cash and the remaining sum was held to cover the cost of the new land and house. The plan granted financial support to each household, ranging from two to five pounds per-month, until the land would begin to yield.

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(1) Most of the analysis of this part of the report is taken from unpublished notes of the « Egyptian Scheme of Nubian Settlement » written by Dr. Hussein Fahim at the Social Research Center, American University in Cairo.

(2) This committee was called « Investigation for Nubian Demands » and its main function was to settle Nubian problems and to transfer Nabian ideas to the policy makers

The Ministry of Land Reform was in charge of reclaming the new land at Kom Ombo and Isna for the Nubian settlers. The plan scheduled the year 1963 - 64 for completing the reclamation of 27,000 feddans at Kom Ombo and 8,000 feddans at Isna. The plan also stated that irrigated land would be distributed to the head of each household, even to those who had no land in old Nubia, being agricultural worhers by profession, but who had owned a house at the time of the 1960 census. In keeping with the basic provisions of the Agrarian Reform law of 1952, the land distributed would range between two and five feddans, depending on the size of each household.

The administration of the resettlement of the Nubians depended on local leaders and active members of the Arab Socialist Union to help the government personnel. Native teachers were recruited for a campaign to prepare the people for possible difficulties and problems. These teachers helped instill in the migrants some understanding of the laws and regulations relating to resettlement and to convince them of the reality of the better way of life awaiting them in New Nubia. Nubian boy scouts were assigned to help maintain order during the move and to take care of the old and disabled. It was also part of the policy of the administration to encourage the participation of the people themselves in the arrangement for their own evacuation.

Old people, especially those who had never left Nubia, felt threatened by the new way of life, fearing an inability to cope with the many changes they expected to meet. Young men, especially those who had urban experience or some education, seemed to be more optimistic about the move. They looked on the resettlement as a good opportunity for establishing an improved Nubian community by gaining public services and a formal access to the non-Nubian milieu. Women, whose husbands were working in urban areas, favored resettlement in the hope that it might offer them a more suitable life in which their husbands could later join them when economic opportunities became available.

On completion of the move Nubians began expressing their dissatisfaction with some of the new conditions. These included housing which some Nubians disliked because it caused them to live in compact complexes which lacked the privacy and space they had enjoyed in their old houses. Some Nubians complained of being separated from their kin groups who lived in different parts of the village.

With the sudden switch from a subsistence to a cash economy, the hitherto trbal base of the Nubian social structure found it self being transformed into a peasant system. This phenomenon led to some conflict and maladjustment. Nubians were used to shopping in their local market on credit. In the new communities, frequent complaints were made against « the cash and impersonal market ». They were used to subsistance farming, while in the new communities they had to apply modern agricultural practices such as crop rotation and cooperative marketing procedures.

The third area to be examined is the North Western Coastal Region which runs for some 480 Kilometers along the coast west of Alexandria to the Libyan border. It extends roughly 25 kilimeters inland and has an area of some 12,500 sq. kilometers. The rainfall of the area is low, averaging 100 - 150 mm. per-annum. The region is under the jurisdiction of GADD (General Authority for Desert Development).

Only 350,000 of the 3.8 million feddans of the region have soil suitable for all crops. Only 15,000 feddans are occupied by perennial crops, while 100,000 feddans depend on rain for cultivation. The region suffers from a shortage of water on the one hand and a lack of good soil on the other.

The population of the region was 80,000 in 1966 and may be characterized as having a tribal structure. The most important tribe is the Awlad Ali of the Saadi tribal group.

The traditional tribal system is a fundamental factor to be taken into account in any land settlement and development program. In this region, a system of tribal land ownership had traditionally prevailed and the territorial groups of tribes, sub-trbes, clans and families who hold and use the land do so without legal title and practically without any interference from the government. Each kin group was traditionally attached to a specific area of land which was considered as its traditional homeland. Every tribal member knows where he belongs and the boundaries of land with which his tribe is associated and within which he moves with his herds. Each group traditionally follows certain rites of a fairly fixed annual cycle, thus visiting certain places at certain times, staying in each place a certain period of time before evacuating it.

The population of this area will probably reach 130,000 by 1985. As nearly half of the present population is under 15 years of age, the active population will form a far greater part of the whole population in 1985 than it does now(1).

After various governmental surveys, it was found that the development of farming in the region could best be based on a more intensive use of the available land resources rather than on an extension of the existing cropped area. Production could be increased through the introduction of better methods of cultivation and through a better utilization of winter flood waters, making it possible to change the cropping pattern. In this context, land settlement assumes great importance. The main objective of land settlement is to incorporate land utilization into a system of land tenure which will promote individual interest and provide an incentive toward an efficient utilization of and an effective development of the land.

In order to implement a resettlement program on land with improved soil and water conditions, the traditional tribal system of land tenure had to be replaced by a system of individual holdings. Between 1965 and 1970, 75 per-cent of all tribal holdings were converted to indiviual ownership through government action.

In order to encourage settlement on the land, the Desert Law Act was passed which gave recognition to the legality of tribal possession of the land. Enacted in 1958, and put into effect in 1960, this law gave titular possession to a particular piece of land to a family which could prove that it had settled to cultivate and develop the piece of land in question.

In planning land settlement projects in the region, consideration was given to ensure a holding of viable size, capable of yielding a minimum target income and making possible an equitable distribution of land and water resources as well as the full employment of all other working resources. Projects were drawn up to fit the following types of configurations :

(a) The Village Settlement, representing a grouped type of settlement involving the concentration of the settlers into one locale.

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(1) F.A.O. « Pre-Investment Survey of the North Western Coast, Technical Report p. 11 ».

(b) Open Country (dispersed farmstead) Settlement made up of scattered farm houses, the homestead of each settler being isolated within or close to his farming unit.

(c) The Line Village Settlement, in which settlement is concentrated along certain roads running parallel to the canals. In this system; farming units are narrow and long.

Over all, in Egypt, in order to be qualified to be selected as a settler for reclaimed land, the settler must meet the following conditions : possess Egyptian citizenship; have been engaged in agricultural work for at least two years; to be a holder of no more then five feddans. Preference is given to landless farmers; the settler must be free from any contagious diseases, such as tuberculosis, leprosis, bilharzia and ancylostoma; have a clear police record; be within the ages of 21 and 50 years; be literate; be preferably a citizen from a neighboring village or provience; be preferably an agricultural laborer who has worked on the reclaimed land on a hired basis for at least 18 months; move with his family to the new settlement and cultivate the land by himself and his family members; join the cooperative society; join the community development council; be a permanent resident in the community.

The provision of public services in the new land, such as education, health, youth and social welfare, are the responsibility of the related ministries. In order to ensure the extension of such servides in an integrated way, coordinated ministerial committees, headed by the Director of Community Formation and Development Department, were formed comprising representatives of EAUDRL and the Ministries of Youth, Social Affairs, Education and Health.

Coordinated committees are also formed at the zone level. Each committee is headed by the governor of the province in which it falls. Chiefs of the Governorate's Departments of Education, Health, Social Affairs, Youth, and Communication act as members. The EAUDRAL director general of each zone acts as the secretary of the zone coordinating committee. These committees determine the needs of the zone in terms of public services and communicate them to the National Board.

A Special Committee on Research and Evaluation, made up of highly qualified research workers from research centers and universities, has also been formed at the central level to promote and supervise field surveys and studies in the new communities. The members of this committee conduct a comprehensive survey on each settled family at the initial period of settlement. This survey is repeated every two years for each family.

Through the formation of community councils representing the different cultural groups, for planning and executing community projects, based on the people's falt needs, a sense of community belonging can be created. These councils have an important role to play in co-ordinating the activities of the different governmental agencies at the local level which are working for the welfare of the settlers. They also have an important function in relating the social and economic programs of tne settlers to the broader national plans of economic and social development.

The organization of functional committees to deal with the main problems of the community can help involve each settler in the affairs of his community, thus reducing to a minimum any political discontent or dissatisfaction. It is the job of the agricultural committees, assisted by a specialist, to help demonstrate to the new settlers the most up-to-date agricultural practices and to plan an agricultural policy for the community, relating production to market demands. The agricultural committees can also help stimulate the settlers to improve livestock and poultry production. The co-operative societies can help the setlers to obtain loans on easy terms, thus saving the settlers from professional money lenders. The co-operative societies can also promote the joint use and maintenance of agricultural equipment and implements, helping the new settlers to benefit from the equipment at the lowest possible cost. The societies may also help the settlers toward the creation of part-time employment opportunities in such activities as weaving, carpentry, blacksmithing, sewing and knitting which enable the family to utilize its spare, or leisure, time in profitable and useful work.

Through the formation of a village social welfare committee, the sense of responsibility among the settlers may be increased. This committee can help the settlers discover and define their individual roles in promoting the welfare of their community. Through joint work this committee could help bridge the gap between the different heterogeneous groups and develop harmonious relations among all the settlers. Depending on the systems of social security and social services available in the country, this committee could meet the growing needs of families and children in the new situation. The committee can further aid the settler by explaining to him his property rights and helping him to use those rights for the welfare of his community and family.

Another problem facing the new land holders is the new pattern of social relationships which the system of land holding requires. The successful implementation of land settlement schemes not only gives farmers greater economic leverage and more security, but also helps them achieve a sense of human dignity and enjoy the privilege of full citizenship. It is a transfer from a system in which a man's rights and duties depend on his ascribed status in local society to a community with new ideals where the inter-relations are determined by the individual's capacity and personal qualities. It is an « achieved status » community rather than an « ascribed status » community. The creation of effective community relationships will make the new land holders conscious of their new status and develop in them a sense of individual dignity and self-respect.

To improve the possibility of effective community work the selection of the land holders for one particular settled area should be made from people with common interests and, if possible, belonging to one religious sect.

Prospective land holders should also be trained in how to live together as a community and how to plan and execute community projects aimed at the improvement of their living conditions. It is advisable to involve them in building their new houses, construction of public buildings and other activities which would stimulate further group action. They may also participate in setting up community centers which will have facilities for meetings, reading and radio listening. A community development specialist can also play his role in discovering leadership qualities in individual members and in developing these qualities so that they can be utilized in planning and excuting such community activities. These leaders will help to disseminate, through direct or indirect methods, the information required for the continued growth of the culture of a community.

POLICY OBJECTIVES AND APPROACHES IN RELATION TO INTEGRATED DEVELOPMENT AND SETTLEMENT OF NEW LANDS IRRIGATED BY HIGH DAM WATERS(*)

By

A. S. Alwan

I — INTRODUCTION

The integrated development and settlement of new lands comprises a combination of policy, actions and programs undertaken at the national, sector and local levels, aiming at improving the productivity of the new lands and the living standards of their population. This approach makes clear the interdisciplinary nature of the endeavor, requiring the coordinated participation of many governmental and popular bodies.

Since 1966 the Government of the Arab Republic of Egypt has undertaken an ambitious program of reclaiming approximately 1.3 million acres irrigated by the High Dam waters and resettling new communities there to meet the increasing demand for food, together with the equally pressing need to reduce population pressure in the densely populated old lands by migrating communities from them and resettling them on new lands. This work has been handled by a number of organizations under the Ministry of Land Reclamation. The Egyptian Authority for Utilization and Development of Reclaimed Lands (EAUDRL) was established during 1966 as an affiliated, but autonomous organ of the Ministry of Land Reclamation for the development and settlement of such lands. Ten areas known as Sectors have been delineated covering about 750,000 feddans so far (including Nubarieh) and about 40,000 families have been settled on about 150,000 feddans, the rest of the area is being cultivated through the state farms. The yearly budget of the Organization of about US$75 million is invested in providing supervisory, technical and executive services to the sectors besides running about one hundred state farms where full scale measures are taken to bring the land to the productivity level during the course of a few years. A part of the budget

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is spent on providing facilities like housing, loans for the supply of farm requisites and scores of other services to the new settlers.

As a result of the operations of the scheme, for about four years the Government felt that the pace of socio-economic development of the newly settled communities was slow and lacked the integrated approach. Hence, United Nations assistance in this important field was requested, in order to enable it to develop the newly reclaimed lands and establish thereon economically viable and socially integrated communities of settlers. Such assistance was further necessitated by the fact that it was strongly believed that the multiple effects, social and economic, of the great investment in the High Dam could only be realized if the Government succeeded in its efforts to establish permanent, productive and self-reliant communities to cultivate and improve the productivity of such lands.

II — OBJECTIVES OF THE PROJECT

The United Nations assisted project, known as « Integrated Development and Settlement of New Lands Irrigated by the High Dam Waters » is thus of prime importance to the Government. It has been designed to assist the Government through the Egyptian Authority for the Utilization and Development of Reclaimed Lands (EAUDRL) in carrying out its program for the integrated development and settlement of these newly reclaimed lands on a planned and systematic basis.

Of the total estimated sum of US$1,905,700 which this Project will cost, the Government will contribute the equivalent of US$931,700 towards the provision of counterpart staff, local equipment, certain supplies and services, while the remaining US$974,000 will come from UNDP funds for the supply of experts, consultants, fellowships and equipment. The internationally recruited experts include : Land Settlement Planning and Implementation, Social Development Planning, Community Development, Agricultural Services, Agricultural Cooperatives, Town and Village Planning, Handicrafts and Small Industries, Vocational Training, and Action-Research & Evaluation.

The main objective of the Project as laid down in the Plan of Operation is to assist the Government of the ARE in establishing economically viable and socially integrated communities of settlers to develop the newly reclaimed areas irrigated by the High Dam waters. This could be done through a comprehensive coordinated plan and by concentrating attention in the fundamental elements of planning, research and training.

The achievement of this prime objective necessitates a series of more explicit and specific objectives, of which the following are the most important :

(a) *Planning :* Improvement and strengthening of the overall settlement planning and programming process of the Egyptian Authority for Utilization and Development of Reclaimed Lands (EAUDRL).

(b) *Advisory Services :* Provision of advisory services to the EAUDRL and the Directors of the various reclamation and settlement zones in the fields of training, research and planning and implementation of the settlement and community development processes.

(c) *Research :* The establishment of an action-research program for evaluating past settlement experiences and for demonstrating new methods to accelerate the socio-economic development of the newly reclaimed lands, and assuring a continuous « feed-back » of field experience into the EAUDRL Planning Process.

(d) *Training :* The establishment of a multi-level Training Center in one Sector (Mariut), and sub-centers in other major reclaimed areas, for up-grading the competence of the technical and supervisory personnel of EAUDRL as well as for training local leaders and settlers in the techniques of organizing local development efforts.

The crucial importance of planning, research and training, for which assistance was sought, is derived from the fact that it is intended to provide the knowledge and experiences needed by EAUDRL to improve its planning and programming processes, so that research results based on experiences, are fed-back into planning and training programs. These efforts are to ensure effective methods, procedures and techniques on how to settle successfully large numbers of people in communities which can support themselves and contribute more effectively to the overall national development activities.

III — ACCOUNT OF EXECUTION

1. *General :*

The Project was initiated in 1971 and is scheduled to continue until the end of 1974. At the beginning of 1972 when the international experts began to assemble and the objectives of the Project, as well as the details of needed activities became clearer, a more elaborate and a more comprehensive program of work in the fields of training, action research, and advisory services, was prepared for the structural nine units of the Project. These units correspond to the nine main disciplines for which international experts are recruited, namely (1) land settlement, (2) community development, (3) social development planning, (4) general agricultural services, (5) handicrafts and small industries, (6) vocational training, (7) cooperative development, (8) physical planning and housing, and (9) evaluation and action research.

It should be noted, however, that because of the multi-sectoral nature of the problems and the need for a concerted approach to their solution, an integrated approach has been followed and this required the coordination of activities of the various units of the Project. Therefore, in preparing the program of work for each unit, the selection of activities was primarily aimed at achieving the Project's objectives and not at finding tasks for the Project units. Tasks suggested by individual units have been checked against Project objectives and were coordinated so as to achieve the best results as defined in the Plan of Operation.

2. *Main Activities :*

A number of activities, impinging directly on the lives of the local communities, have been carried out by the Project through the counterpart staff at the headquarters and field levels. They relate to advisory services, training, action-research and evaluation. A brief mention of these activities is given in the following paragraphs :

(a) *Advisory Services :*

Advisory services are essential at both headquarters and zonal levels in order to improve and strengthen the overall settlement planning and programming process and the operational aspects. The advisory services tendered by the Project can be classified into three categories :

i) *Areas of obvious lapses and deficiencies :*

The experts in different areas of specialization have been able to identify areas of obvious lapses and deficiencies through the reconnaissance surveys carried out by them in the field. These have since then been discussed with the local counterpart staff at the project, EAUDRL headquarters and sectors levels. Necessary instructions have either been issued or are in the process of being issued for modifying and amending the existing situation.

ii) *Areas where Action-Research is necessary :*

There are areas where deficiencies have been discovered, but before necessary amendments and modifications are effected on a large scale, there is a need for some pilot experimentation for testing the possible solutions at the field level. This aspect is attended to by the experts. On the basis of action-research findings, advisory services will be tendered to the concerned counterpart staff at different levels.

iii) *Special Areas :*

There are either special problem areas or areas where even preliminary thinking has not taken place. These are investigated and the attention of EAUDRL is drawn to them so that a balanced and accelerated pace of development may be assured in the newly reclaimed sectors. One of the latest examples of this aspect is the carrying out of a feasibility study for the establishment of agro-industries in the newly reclaimed sectors of North West Delta, North Tahrir and Mariut.

(b) *Training :*

The second major activity of the Propect is training. EAUDRL employs 27,000 professional persons at different levels, i.e., at Headquarters and in the Sectors. The orientation of the staff in the new policy of reclamation, development and settlement is of vital importance for the efficient working of the organization so that it may render the requisite types of services to the new settlers and accelerate the pace of development of these areas. The overall progress in training by EAUDRL has been slow and poor in quality. In order to improve the situation, our Project, in consultation with EAUDRL, has arranged to impart 23 special short duration courses during 1972 for the trainers and village leaders. About 700 persons have received benefit from such training in community development, agricultural cooperatives, farm management, agricultural extension, agricultural processing, vocational training and handicrafts and small industries, social and physical planning and housing, public health and family and child welfare.

Some of the training courses, which were geared for community development and social workers, cooperative extension officers and cooperative book-keepers and storekeepers, were particularly valuable as they established better mutual understanding between the local leaders and the official field supervisory staff through the infusion of new techniques of joint collaboration in developmental activities. In fact the courses introduced new approaches to the solution of local problems such as arranging that the people concerned participated directly in self-help schemes, thus highlighting the paramount role of local institutions in the achievement of the goals of integrated socio-economic development.

As a result of the training courses carried out during 1972 much valuable experience has been gained, and this has resulted in decisions being taken to introduce the following two principles into the training courses to be carried out during 1973.

i) The Project will concentrate on training only key personnel and those responsible for training other staff; these latter, after themselves receiving training, will conduct courses for lower-level staff and local leaders, under the supervision of, and with assistance from, the experts of the Project.

ii) There will be special emphasis on multi-disciplinary training courses, in order to encourage among the trainees an integrated approach to developmental activities and problems.

(c) *Action-Oriented Research :*

Action-oriented research is that type of applied research which is primarily concerned with discovering the most effective means of bringing about a desired social change or any other improvement in an existing situation. Action research deals with the extension methodology on the one hand and with the actual implementation of the projects in the field through pilot experimentation on the other. On the basis of the successful results achieved, future schemes may be planned for wide scale extension.

The need for evaluation and action research is obvious. It was specifically mentioned in the Plan of Operation that one of the objectives was to evaluate the past settlement experiences. At the same time to carry out action-oriented research projects which may show the way as to how the expansion of the various components of the program of reclamation, development and settlement of new lands could proceed on firm and well tested lines so that the results obtained from such efforts may be successful and the people may show the desired type of satisfaction with them.

The field surveys and investigations carried out by the experts of the Project have brought forth clearly the strong and weak points in the working of the various aspects of land reclamation and settlement projects in the country. On the basis of the findings obtained from these field investigations, about a dozen action-research projects have been prepared and initiated or implemented in some selected sectors of the newly reclaimed and settled areas. These action research projects include the following :

1. Management, maintenance, repairs and standardization of farm machinery;
2. Introduction of specialized farming in selected reclaimed areas;
3. Evaluation and improvement of the consolidated land utilization system based on fragmented family holdings;
4. Tree planting and beautification of villages in the newly reclaimed and settled areas;
5. Evaluation of the existing sizes of family holdings in reclaimed sectors, with the aim of determining viable sizes;
6. Study of improved methods of sun-drying grapes and the establishment of a proto-type unit for the production of raisins;
7. Organizational set-up for the collection and marketing of milk;
8. Community contributory housing scheme;
9. Motivation and activation of the agricultural cooperative societies in Mariut and East Delta Sectors;
10. Activation of the community development councils in selected sectors;
11. Extension work among the younger age groups in the newly reclaimed areas;
12. Women's and children's programs in the newly reclaimed and settled areas.

A report has been issued by the Project, in September 1972, giving details of each of these action research projects : their objectives, area of operation, methodology and plan of action, periodical review and evaluation.

It should be noted that apart from the action research mentioned above, a number of other studies were undertaken by the Project; prominant among them are the following two major studies :

Evaluation of the Past Settlement Experiences with emphasis on the assessment of the types of tenure systems (tenancy, owner-cultivatorship, and state farming) applied by the Government in the reclaimed lands irrigated by High Dam Waters. The objective of this study was to find out the relative merits and demerits of the three types of land tenure systems and to indicate precisely which of the three types of settlement and tenure system has been most successful and most feasible in terms of increasing agricultural and net farm income, the rate of employment, and the emergence of economically viable and socially integrated communities of settlers on reclaimed lands. Two sectors, North West Delta and North Tahrir, representing almost two thirds of the reclaimed types of soils in the country, were selected for this study. On the basis of the findings the EAUDRL will be advised which type of land tenure and settlement system is the most feasible one under the present conditions and what further improvements are possible in the working of other aspects of the program. The findings of this study will be available by the end of December 1972.

The second study is the Feasibility Study on the introduction of agro-industries in the Sectors of North West Delta, Mariut and North Tahrir. This is another important study which the government requested the Project to undertake during April 1972 with a view to finding out the present and future potential for establishing agro-industries in these areas. The government felt that through the process of agro-industrialization, the pace of socio-economic development of the newly settled communities could be accelerated. It is hoped to achieve this goal by providing higher return from the sale of processed products and employment opportunities for the children of the settlers. This study has been completed and the report including the main findings and recommendations has been submitted to the government. Different aspects relating to agro-industrialization have been analysed in the report. Recommendations have been given as to how the government should proceed with the agro-industrial projects in the future and how it should tackle the problems relating to the provision of capital, technical know-how marketing, storage, distribution, etc. New strategy in effecting improvement in the cropping patterns in the three sectors has also been indicated, and procedures for obtaining international and bilateral assistance have been suggested.

Other research designed to set out the present situation and suggest measures for improving EAUDRL's implementation techniques include case studies on community development councils, cooperatives, agricultural services, housing, rural health centers, youth clubs and craft centers.

THE ECONOMIC DEVELOPMENT OF EGYPT 1952 - 1972
PROBLEMS, ACHIEVEMENTS AND PROSPECTS

By

Abdel Monheim Radi [*]

This study of economic development in Egypt will deal with three basic subjects. These subjects are : the economic conditions and problems of the Egyptian economy; different efforts toward economic development; an assessment of these efforts.

The economic conditions and problems of Egypt point up one fact, that Egypt is an underdeveloped economy. These problems and conditions are no different from those of many other underdevoloped economies. Reference here is in regard to the basic problem which is that of a rapid increase in population with a slow rate of increase in national income. It will be apparent from a look at the past performance of the Egyptian economy that the economic problem is quite serious. It is estimated that per capita income in the period 1930 - 1949 was much lower than it had been in the first two decades of the twentieth century. Data of per-capita income in 1913 prices give the following figures(1) :

Per-Capita Income in EPEA *Prices*

Year	1913	1921 - 28	1930 - 33	1935 - 39	1940 - 49
L.E.	12.4	12.2	8.2	9.6	9.4

One reason for the decreased per-capita income was the very high rate of increase in population growth and the very limited growth in the amount of resources.

The increase of people in Egypt is at a very high rate and therefore is seriously intensifying the problem of economic development. This is obvious from a glance at the estimates of Egyptian population growth from 12 million in 1910 to about 25 million in 1960. This

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(1) Charles Issawi,*Egyptian Revolution, An Economic Analysis* Oxford University Press, London, New York, Toronto, 1963. p. 34. The Egyptian pound has several exchange rates; however, one can average the Egyptian pound as being equal to about two U. S. dollars.

L.E. = Pounds Egyptian.

means that the population doubled over a period of fifty years. From 1960 to 1971 the figure reached 34 million.

This is an increase of about 40% in almost ten years. In comparative percentages the rate of increase of population was about 1.3% per-year for fifty years(1). At the present time this rate has reached its current peak of almost 2.8% per-year. This is one of the highest rates of increase of population in the world. One, therefore, can imagine the heavy burden that this rate of population increase places upon the economic development of the country.

In this context it is significant to note that the economic quality of the population is very low. By economic quality reference is made to the ratio of those of working age in comparison to the total number of the population. This ratio is estimated at 69% in Sweden, an educated-industrialized country. It is estimated at 57% in Egypt, a nation of a high illiteracy rate and beginning industrialization(2). This is, of course, in addition to the existence of bad health conditions among the population.

As to the limited growth of Egyptian economic resources, one can demonstrate this by talking about the conditions and problems of some major economic activities of the economy. As is the case in many underdeveloped economies, the leading economic activity in Egypt is agriculture. In 1960, out of a total population of about 26 million, 63% were in rural areas(3). Further, 54% of the total labor force, estimated at 5.975 million in 1959 - 1960, were working in agriculture(4).

While the contribution of income from agriculture to national income was estimated at only 31.2% of the total for 1959 - 1960(5), the majority of economic activities in the country are directly dependent on the agricultural sector. It is estimated that in domestic trade 32% of business establishments are engaged in the handling of agricultural products and food stuffs. These businesses employ 31% of those working in services. As far as foreign trade is concerned, agricultural crops and products represent 96% of Egypt's exports(6).

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(1) Rached Al-Barawy, *Economic development in the United Arab Republic.* Anglo-Egyptian Boo[illegible]op, Cairo, Egypt, 1970 p. 3.

(2) *Ibid.*, [illegible].

(3) *Statistical Handbook,* Central Agency for Public Mobilization and Statistics. Cairo, 1965, p. 11.

(4) National Planning Committee : « General Frame of the Five Year Plan for Economic and Social Development », Cairo, 1959, pp. 13 — 14.

(5) *Ibid.*, p. 10.

(6) Sayed Marei, *Agrarian Reform in Egypt.* l'institute Francies D'Archologie Orientale, Cairo, 1957. p. 270.

Agriculture, therefore, is the single most important source of foreign exchange in Egypt.

In addition, statistics show that 50% of the factories, which employ 54% of the total industrial labor force, use raw agricultural material. Investment in these industries accounts for about 50% of the capital invested in industry(1).

Although the agricultural sector dominates the economic activity of Egypt, it has been suffering from a variety of problems for a considerable period of time. One of the most serious problems is that of the failure of the growth of cultivated land to keep pace with the growth of population. This is obvious from the fact that over more than sixty years, from 1897 to 1960, the increase in population amounted to 160%, while the increase in cultivated land and the cropped area stood at 15% and 53% respectively(2). At present the cultivated land in Egypt is estimated at about six million feddans which is about 2.7% of the total area of the country(3).

Another problem with Egyptian agriculture is that of the decrease in agricultural production in the period from 1939 to 1950. This decline is estimated at 15% according to one writer(4).

Surplus labor represents another problem in Egyptian agriculture. In 1959 - 1960, the Planning Committee estimated the working labor force to be 5,975,000 of whom the agricultural sector employed 3,245,009, i.e., 54,3%(5). The National Bank of Egypt, in its analysis of the Egyptian economy, estimated that in 1959 - 1960 about 975,000 agricultural workers, or 30% of the agricultural working forces, were really not needed in agriculture(6).

A more serious problem that has been associated with Egyptian agriculture for a long period of time is the fragmentation of landownership and the noneconomic size of the average farm. Estimates for the distribution of landownership in Egypt before 1952 reveal that 94% of the owners possessed only 35% of the total cultivated area, while 6% of the owners held 65% of the land(1). In addition to the maldistribution of overall land-ownership, 42% of the total cultivated land was divided into separately cultivated plots of an average area of one feddan. In fact, the 94% of the landowners who had 35% of the land, had holdings of less than five feddans each. The social disadvantage of the extreme inequality of land-ownership was a source of major social conflict between the small and the big farmers within the village structure. This was not a favorable condition for either increasing production or improving incentive.

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(1) *Ibid.*, p. 270.

(2) Abdul Roaf Mohamed, *Policy of Land Reclamaction in U. A. R.* National Institute of Planning, Cairo, memo No. 341, 1962, p. 1.

(3) *Statistical Handbook, 1964.* p. 15 One feddan equals 1.05 acres.

(4) Marei, *Agrarian Reform in Egypt.* p. 252.

(5) National Planning Committee, «General Frame of the Five-year Plan» Cairo, 1959 p. 13.

(6) National Bank of Egypt, *Economic Bulletin*, vol. XV., No. I., 1962, p. 10.

The fragmentation of the land was much more serious than what is revealed by the above figures. In 1949, about 60% of the cultivated land area was land cultivated by tenant farmers(2). Tenancy cultivation, *per se*, is not necessarily an inferior method for cultivation, but the case in Egypt was different. First, the plots of land rented were very small in size, second there was no security in the duration of the tenancy, and third, the rent, per-feddan, was quite high(3). All of the above mentioned factors, as well as others, made the condition of the Egyptian farmer and of Egyptian agriculture quite miserable.

The farmers, plagued by low incomes, unable to save and always in debt, accordingly were forced to rely upon primitive methods and techniques of production. Many of these are still used in agricultural production. The farmer is thus living a very primitive existence, living in huts of muds with almost no furniture. His assets of animals share his shelter. Further he suffers from disease, malnutrition and illiteracy.

Industrially in Egypt there were no signs of real attempts at modern industrialization of Egypt until the end of World War I. Even then, up to 1920, the majority of industrial, commercial and financial activity was undertaken by foreigners.

Because of World War I it was difficult to import manufactured goods from outside and a valuable chance was given to domestic industry to develop. Accordingly, cotton, spinning and weaving factories were established. Also a number of sugar refineries were built. Yet there was basically an absence of Egyptian owned industrilization. This was largely the result of the lack of capital and experience. However, another important factor was the interest of colonial powers and foreigners in investing in financing and exporting raw Egyptian cotton to Western factories and in importing finished products into Egypt.

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(1) *Statistical Handbook*, p. 40.

(2) Doreen Warriner, *Land Reform and Development in the Middle East, A Study of Egypt, Syria and Iraque.* The Royal Institute of International Affairs, Oxford University Press, 1957. p. 25.

(3) *Ibid.*, p. 27.

In 1920 an Egyptian financial institution was established called Bank Misr, « Bank of Egypt », by a pioneer financial and business nationalist, named Talaat Harb. This bank was able to finance, through direct participation, a group of industrial companies in the field of cotton manufacturing.

The deveopment of indutrsy in Egypt was also influenced by the tariff protection laws issued in 1930. Before 1930 the tariff duty on imports was 8% on the value of almost all imported goods without differentiation between imports of finished goods or capital goods or between necessary or luxury goods. This was an open door policy which did not help to either protect or guide domestic industrilization.

The laws issued in 1930 applied a policy of economic protection against the invasion of foreign goods in the Egyptian market(1). High import duties were imposed on semi-finished and finished products, with very low duties on imported raw material and capital goods.

This procedure encouraged local industries to develop. That development demonstrated by the following figures showing the ratio of imported raw materials and semi-manufactured goods to the total value of industrial imports.

Percentages of Types of Imports

YEAR	1930	1952
Industrial raw material	10%	30%
Semi-manufactured products	9%	37%
Finished products	81%	23%(2)

Statistics show that, before World War II, Egypt was self-sufficient in the production of sugar, cigaretts, shoes, cement, soap and some other consumer goods(3).

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(1) Mohamed Saad, « Tariff system in Egypt in the last fifty years, *The Egyptian Society for Political Economy, Statistics and Legislation. Research Papers on the fiftieth Anninersary*. Cairo, 1960.

(2) Mohamed Saad, « Tariff system in Egypt » p. 455.

(3) Barrawy, *Economic Development* p. 27.

World War II gave an extra push to the industrilization of Egypt. The War prevented major imports from outside and thus gave rise to an increased demand for locally produced products. Yet, intensive efforts at Egyptian industrilization is to be dated from the 1950's and the early 1960's when cmprehensive economic planning took place.

As can be seen from the conditions of foreign trade and finance, it is obvious that Egypt had the typical characteristics of an underdeveloped economy. The banking system was dominated by foreign owned banks. This was the case until the start of the 1960's. The foreign banking system was only interested in financing the main agricultural exports and never tried to encourage the industrilization of the country.

From the beginning of the present century to 1930, the export of cotton and cotton seeds made up about 90% of the total exports of Egypt. Imports of finished textile products made up about 25 to 30% of total imports. Imports of grain and food stuffs made up another 20 to 25% of total imports. Imports of machines and capital goods were of no significant importance at that time. That picture of course changed during the period after 1930 because of the new traiff laws. Those types of imports acheived major importance with the start of economic planning in 1960. Yet, the balance of trade suffered from severe deficits for most of the period from the start of the century.

True efforts toward economic development in Egypt can be dated to the year of the Egyptian Revolution, 1952. Attempts to develop Egyptian agriculture also can be dated to the land reform law introduced in 1952 and the introduction of cooperatives in the countryside. Land relcamation efforts and the High Dan project received their initial discussions at that time.

The land reform law of 1952 stipulated that no person should own land in excess of 200 feddans, which in 1961 was changed to 100 feddans. In 1969 the upper limit of land ownership per-person became 50 feddans and 100 feddan for a family. Land in excess of that limit is taken over by the government and distributed among the farmers. Compensation, however, is made to the original land owners.

Lands to be distributed is limited to only those farmers having less than five feddans of land. The ceiling for land distributed to a farmer is five feddans. The law also included some measures to reduce the amount of rent paid for renting of land and to secure stability among the farmers renting lands(1).

The land that is distributed is relatively a small portion of the total cultivated area; it is estimated at 17% or about one million feddans(2). Thus the 94% of the formers who are small land owners increased their land holdings to 52%, as compared to 35% before the law, of the total cultivated land.

The land reform measures are successfully eliminating a fuedalistic system and the concentration of land ownership in the hands of a few. This is a step toward providing better production incentives by making the farmer a land owner. Also it provides social justice and removes tension and class conflict in the countryside.

To avoid the economic disadvantage of the small farm agricultural cooperatives were introduced. Land obtained by the farmer as a result of the agrarian reform carried a condition of the farmer becoming a member of a cooperative organization. Cooperatives either have been or are being developed throughout the whole countryside by using some economically compelling measures. Farmers who wanted to obtain, on agricultural credit, chemical fertilizers, better seeds, and so forth, at low prices from the government, could do so by becoming members of a cooperative organization. It must be noted that the agrarian reform and the spread of cooperatives were highly responsible for the reorganization of agricultural production at a low cost. Cooperatives here worked as a channel between the government and the farmer. Cooperatives also helped in serving the purpose of economic planning in agriculture and allowed for the use of crop rotation systems. Cooperatives are also highly responsible for the increased agricultural production which has been occuring from 1952 to the present.

The High Dam project is supposed to increase the cultivated land by 1.3 million feddans. This is in addition to the conversion of about 700,000 feddans from basin to perennial irrigation(3). Also the Dam allows the generation of 10 millions KWH of electric power for industry and for mechanization of the countryside.

Unfortunately, until the present, land reclamation projects in Egypt have not achieved all the desired targets. This is basically because of the shortage of foreign currency that is required for the needed machines and equipment.

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(1) Jabriel Saab, «Rationalization of Agriculture and Land Tenure Problems in Egypt». *Middle East Economic Papers, 1960*. American University of Beirut, 1960, p. 659.

(2) *Statistical Handbook*, pp. 38, 42.

(3) That is land which will grow three crops a year instead of one.

In the field of industry, large scale and intensified efforts toward industrialization of the country started in 1957 through partial and then in 1960 through comprehensive planning. It was obvious to the political regime by that time that the policy of a free market economy would not allow the country to achieve large economic development in a short period of time. Thus, the government paved the way toward development of economic institutions in the country by applying socialistic measures in most areas of the economy.

In 1957 the government issued laws requiring that the ownership of banks and insurance companies must be in the hands of Egyptian natives. This was intended to liberate the economy from the domination of foreign banks.

Comprehensive planning, aimed at doubling the national income within ten years. This meant an annual rate of increase of 7.2% of the national income. The plan aimed at changing the structure of the economy. This change was to be achieved by giving intensive emphasis to investments in industry and non-consumer commodity sectors.

During the period from 1959/1960 to 1969/1970, the net national product of Egypt increased on an average rate of 4.9% annually. Per-capitia income increased at a rate of 2.2% annually during the same period(1). Accordingly per-capita real income increased from L.E. 50.2 in 1959/60 to L.E. 63 in 1969/70. This is a considerable increase in per-capita income, especially when viewed in the light of the high rate of increase in population. The change in the structure of the economy can also be demonstrated by the fact that in 1959/1960 employment in agriculture was 54% of the total employment in Egypt. This ratio was reduced to 48.9% of total employment in 1969/70.

The change in economic structure is the result of the great amount of investments which took place during the past decade. Total investments estimated at 1959/60 prices reached an amount of L.E. 2.9 billion. 62% of this amount was allocated to industry, mining, agriculture and electricity. Accordingly a large number of industries were introduced into the economy during this last decrade.

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(1) Sintum M. Kabis, « A Note on the Development of the National Economy from 1959/60 to 1969/70 », Office of the State Minister of Economic Planning, 1972.

The most outstanding of these industries are the paper, rubber, textile, steel and pharmaceutical industries. Because of this investment industrial production has increased by 63% during the 1960's.

It is true that Egyptian economic development and planning originally aimed at increasing national income at a rate of 7,2% annualy. However, the actual rate of economic growth has not exceeded an average of 5% annually. This still is a great achievement in the light of the many obstacles which hinder Egyptian economic development.

One important obstacle to economic development in Egypt is the high rate of population increase, especially in the number of dependent children. The government has tried by several means to apply measures to curb increased population. One of these methods is to pay allowances for fewer children. Another important method is to distribute birth control information and means through governmental agencies at a very nominal price. However, major results of birth control programs will take some years to show up.

Another obstacle to economic development in Egypt is the mere transfer from a free market economy to a socialistic economy. The transfer period involves problems of management, planning, pricing, incentives as well as others. These problems take time to be solved. For example, one can look at the importance of the problem of management to the Egyptian economy. There were created overnight about 4800 cooperative organizations all of which needed well-trained managers who were unavailable. Also, the introduction of new, complicated industries and expansion in others required technically skilled labor which is generally rare commodity in underdeveloped countries.

Inflation is another difficulty in the economic development of Egypt. Since 1967 prices started to rise severely in some sectors of the economy. This is because of the war condition and the necessity of increased governmental expenditures on war requirements. In the past few years there has been a cut in governmental investment as well as a reduction in imports of non-war materials. The aim of the latter action was to reduce price increases and to secure a foreign balance of payment equilibrium. Such action has its effect also on the strangthening of the value of the Egyptian pound.

One of the most important factors influencing economic development in Egypt, is, no doubt, the burden of the war with Israel. The slogan of the country became « priorty for the battle », which means that all needed expenditures on national defence must be met first. This did not mean though that spending on economic development plans should completly stop. In fact there were efforts to keep up with all possible spending on economic development projects. Yet, it is estimated that about L.E. 3 billions were spent on national defense during the period from 1967 to 1970 that could have been used for economic planning projects.

War conditions required the closing of the Suez-Canal. The Suez-Canal is an important source of foreign currency to Egypt. Total loss of revenues from this source are estimated at about one billion dollars during the last five years. There is an effort to adopt a project of an oil pipeline to carry oil from the Seuz ports to Alexandria. This is not though a substitute for the Seuz-Canal. Rather, in fact, it aims only at assisting in the field of international transportation.

The influence of the war on tourism is also quite harmful. Although the rate of tourists increased this could be increased even more in the absense of the war. The political atmosphere in the Middle East definitely works against increases in tourism. The political atmosphere also has its detrimental effect on foreign capital investments in Egypt. From the above mentioned reasons, it is to be concluded that the solution of the state of war in the Middle East will allow Egypt to drive ahead rapidly in the field of economic development.

WATER RESOURCES IN EGYPT

By

Ahmed Shoukry and Mikhail Hanna[*]

The River Nile is the main geographical feature in Egypt. The Greek historian, Herodotus, wrote, after his visit to Egygpt about 460 B.C., that « Egypt is the gift of the Nile ». This is true in every sense. People who have lived and who now live in the Nile Valley have always considered the Nile as their main source of prosperity. It supplies them with food, drinking water and the raw material for the Egyptian cotton industry. The government is attempting to develop other sources for the national income, such as, heavy industry, but the Nile will always remain the main source of welfare in Egypt. New projects are aimed toward the efficient utilization of the present Nile water and the decrease of water loss in the upper sources of the Nile.

Intensive studies on the hydrology of the Nile Basin have been carried out. Observation stations have been installed from the upper sources of the River to the Mediterranean Sea. The observations include measurements of rainfall, evaporation, water levels in the river channel, and the river discharges. The daily readings of measurements are communicated to the Physical Department in the Ministry of Irrigation in Cairo. These readings are analyzed and the results are put in the form of tables, graphs, or on probability forms. They are used in forecasting the next data, in planning the regulation systtems or, as in the case of Aswan High Reservoir, the compiled records were used in the design of the reservoir capacity. There are more than 100-years of records of the water discharges which have passed Aswan. These data, combined with the reading of the Roda guage, which was built some 1000 years ago, were used in the design of the capacity of the Aswan High Reservoir.

The area of the Nile Basin is 2,900,000 square kilometers or 1,100,000 square miles. In this basin the rainfall is scanty. The Congo River in central Africa has a basin of roughly 3,600,000 square kilometers, a little larger than the Nile Basin, yet, the mean water discharge of the Congo is twelve times that of the Nile. The reason

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for this big variation is the existence of large swamps near the upper sources of the Nile and of dry zones, with no rainfall, along the major part of its length. The Nile is the second longest river in the world (the longest is the Mississippi). The Nile Basin extends from latitude 4° South to latitude 31° North and thus includes a greater variety of climates, vegetations, peoples and hydrological conditions than those of any other river.

The Nile is fed by two watersheds. The first watershed, the Abyssinian Basin, is the main water source during the flood. It is this source which has formed the Egyptian soils for thousands of years by carrying silt every year from the Abyssinian mountains and depositing it on the floor of valley. The main tributaries from the Abyssinian Basin are the Blue Nile, the Atbara River, and the Baro which is a branch of the Subat River. The Second watershed, the Lake Plateau Basin, is the main water source for the rest of the year. It feeds Bahr el Gebel, which, after passing through a vast swampy area, joins the White Nile.

On the average, 84% of the Main Nile waters arriving at Aswan come from Abyssinia and just 16% come from the Lake Plateau Basin in central Africa. Since the rainfall on both basins is almost the same, 1800 mms. per-year, the big difference in their contributions to the main river is a result of water lost by evaporation and plant transpiration in the swampy zone which we call the « Sudd Region ». In an attempt to circumvent the sudd Region, plans call for the building of the Jongli Canal. This canal will extend from the head of the swamps to the White Nile, a short cut which will save about 20 milliards of water per-year (1 milliard = 1000 million). Similar projects will be carried out to save the water lost in other zones. It is expected when all such projects are completed that the average yearly volume of water through the main river will be increased by about 70%.

The now-existing Nile banks were constructed by Ancient Egyptians some 4500 years ago. Their aim was to confine the river channel and to control the innundation of lands during the flood. This was the basin irrigation. Seed was sown in the mud after the river had subsided and the excess waters had drained of the land. This system of irrigation was controlled by dividing the land into basins and by the construction of longitudinal and cross banks. The art of basin irrigation was modified through the centuries and was used throughout Egypt until the early part of the nineteenth century. In some spots in the basin, water was lifted by primitive machines such as the *shadoof*, worked by hand, and the *sakieh* turned by an animal. There was only one irrigation during the flood and one crop of wheat, beans, Egyptian clover, lentils, barley or chick peas.

When cotton was brought to Egypt at the beginning of the last century it was found that the main irrigation process was necessary during the low-level period of the river. Barrages were built across the river in order to raise the water to a sufficient level to flow on the lands at any time of the year. This is called the perennial irrigation system which is now practiced almost exclusively in the agricultural area. Instead of having one crop per-year, now two or three crops may include the above-mentioned basic crops and/or cotton, rice and cereals.

A barrage or a regulator differs from a dam since its function is to raise the level of the river behind it, upstream, so as to divert some of the water into the canals which branch off above it. It consists of piers carrying a roadway bridge and having grooves for the insertion of gates. The gates are used to open or close the vents between the piers for the purpose of controlling the water level and discharge. There are seven main barrages across the river and its two branches. Hundreds of regulators (small barrages) have been constructed on major and minor canals for the same purpose.

Six dams have been constructed on the river. They are the Victoria Lake Dam (Owen Dam), the Sennar and the Roseris Dams on the Blue Nile, Gebel Awlia, Old Aswan and High Aswan Dams on the Main Nile. Two more dams are now being studied. One will be near the exit of Lake Albert to control the output of the Lake Plateau Basin and the second will be near the exit of Lake Tana to control the output of the Abyssinian Basin. All River Nile projects are planned and studied by a Nile Board on which all the countries located in the Nile Basin are represented. The upper countries which have sufficient rain fall will use the electricity produced from the dams. The dry countries like Egypt and Sudan will receive equal shares of water. The majority of these projects will be financed by Egypt.

Most of the reservoirs in the world are sub-annual storage reservoirs. The cycle for filling and emptying the reservoir is completed in one year. The reservoir is filled during the flood period by surplus water and is emptied during the period when the demand for water exceeds the natural river supply. This is the system which was followed for about 60 years in the old Aswan Reservoir and in Sennar and Gebel Awlia Reservoirs. In 1945, Egypt was in need of additional reservoirs to provide water for the newly reclaimed areas. By studying the compiled 100 years of data on volumes of water carried by the river, it became apparent that in some years not only the new reservoirs but also existing reservoirs could not be filled. This indicated the possibility of famines. After intensive studies it was concluded that water must be stored during years of high discharge in order to be used during the years of very low discharge. The idea seemed impossible at that time because it meant the construction of reservoirs of unusual and enormous capacities. Furthermore, the analysis of the then existing discharge records of the river was not an easy matter. The records covered only a very short period of the river's 10,000 years. Theories based on probability studies of many natural phenomena were initiated and applied to the River Nile. The final result was the design for the required capacity of the Aswan High Dam.

General description of the Aswan High Dam and Reservoir

Some basic information will help the reader get an over all picture of the Aswan project. This is presented briefly as follows :

The purpose of the reservoir is to guarantee a constant annual water source for promoting agricultural development in about two million feedans in the Nile Valley in Egypt and about three million feddans in the Sudan.

- Annual mean flowdown at Aswan = 84 Milliards m
- Annual losses from evaporation and seepage = 10 Milliards m
- Annual share of water used in Egypt = 55.5 Milliards m
- Annual share of water used in Sudan = 18.5 Milliards m
- The gross storage capacity of the reservoir = 194 Milliards m
- Total length of the dam at road-level = 3820 Meters
- Maximum height above the river bed = 111 Meters
- Width of the dam at bottom = 980 Meters
- Width of the dam at road = 40 Meters
- Length of the lake = 500 Kilometers
- Surface area of the lake = 5860 Kilometers
- Length of the diversion canal = 1950 Meters
- Length of tunnels to the power station = 315 Meters
- Number of main tunnels = 6
- Length of one tunnel = 282 Meters
- Internal diameter of tunnel = 15 Meters
- Total installed capacity of the power station = 2,100,000 KW
- Annual generated power = 10,000,000,000 KWH
- Number of power units = 12

The future expansion of irrigation in Egypt

- The present cultivated area = 6 million feddans
- The addition to this area from Aswan High Dam = 2 million feddans
- Expansion in the desert fringes of the Nile Valley (on future water conservation projects) = 1.0 million feddans
- New valley area (on future water conservation projects) = 3.0 million feddans
- Coastal area of the Mediterranean (on future water conservation projects, quite probably desalination projects). = 1.0 million feddans

Summary and final thoughts by Dr. Hanna

One must remember that the Nile is the main source of wealth and productivity for Egypt. Therefore, we must control the Nile. Efforts now are taking several directions in addition to the work with the waters in the Nile itself. We are seeking to veilize what is called the « underground Nile ». This underground seepage is being reclaimed through drains and pumped up to the surface in order to expand agricultural production.

Beyond this we are working in the coastal area to extend canal systems to bring water to new land and to improve collecting pockets for holding and using the rainfall to best advantage. Along the Red Sea we are also working to improve the use of the infrequent rain. In addition it is anticipated that the High Dam may cause new springs to appear in the desert. These new oases will be located and utilized in agricultural production.

A notable approach to the most economical use of water is the system which designs the canal location at lower than ground level. Thus the farmer will take only what he *needs*. He must work for the water! presently about 80% is « lift irrigation ». Rotation programs have been appropriately planned so that for a given canal distribution system water is available only certain days each month. Thus the farmer has time periods devoted mainly to irrigation and this is dictated by the availability of water in his canal; he also has time periods now which may be used for other essential work on his farm.

Of Course, Egypt is one of several nations which are deeply concerned with the present and future development of the Nile. We must have very good relations with these nations and we are meeting regularly with them to engage in cooperative endeaver.

Water is our life and the Nile is our main source of water. Thus we must bring our best talents and energies to bear on steadily improving our utilization of the water resources of Egypt.

EGYPT AND INTERNATIONAL RELATIONS

By

BOTROS GHALI [*]

Egypt's geographical position and historical background give to the country four characteristics : an African country, a Mediterranean country, an Islamic country and an Arab country. This quadruple vocation and her unique geographical situation at the cross-roads of the three continents mean that Egypt has four foreign policies. Being an African country, Egypt can play a positive role of leadership in this emergent continent. Being a Mediterranean country Egypt has often been considered as part of Europe and could potentially become part of it. Although Egypt is not the largest of the Islamic states she is the foremost Islamic country. Being the most important Arab country, Egypt has not only an ascendancy over the Arab League, but also over all the Arab World. A fifth policy emerged after the Bandung Conference, the policy of neutralism and non alignment.

The four processes, Africanization, Islamization, Arabization and Neutralization although inter-connected by their common anti-colonial background are by no means identical nor do they have the same limits. Opposition and conflicts among these policies could happen in the form of incompatibility or in the form of an open conflict or in the form of a competition (African unity versus Arab unity); the problem being to know which of these policies must be given priority. Our object in this short discussion is to deal with the attitude of Egypt toward Africa, Arabism and Neutralism.

The political reunion of the Nile Valley was the first objective of the Egyptian policy. After the independence of the Sudan on the first of January 1956, and the admission of the Sudan as the ninth member of the Arab League, Egypto-Sudanese relations were transferred from the African sphere to the Arab sphere. This change helped the evolution of the Egyptian policy toward Africa which became neither limited to Nile Unity, nor the Arab approach but became a broader and larger policy which proposed to go beyond the Nile Valley and to transcend Arabism through Africanism.

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While willing to be neutralist in the *Cold War*, Egypt is committed to the African struggle for independence and unity. This policy of commitment is based on the following principles :

(a) the struggle for Africa is indivisible. As long as the whole continent of Africa is not liberated, Egypt will feel herself threatened and wars of liberation are imperative.

(b) under-development cannot be countered except on both regional and inter-regional bases.

(c) Africa will not be able to make an impact in the international organizations unless she can speak through a united pressure group. This is even more important in the coming decade because the international organizations will become even more important as mediators between the rich countries and the poor countries.

From the foregoing analysis, it is clear that Africanism does not compete with Arabism, but on the contrary, Africanism reinforces Arabism. It must not be forgotten that more than sixty per cent of the Arab community and more than seventy per cent of Arab lands are in Africa. Thus, Africanism is a defence in depth for Arabism, a source of solidarity and a new opportunity for the Arab World to obtain more assistance in its war of liberation.

The liberation movements which aim to rid South Africa, Rhodesia, Mozambique and Angola of their racial minority regimes are no different from those other liberation movements which struggled against white settlers in Algeria or are struggling now against zionist settlers in Palestine. Africanism and Arabism have as common enemies colonialism, racial discrimination and under-development. The motivation for the fight against these evils, must be important enough to more than counterbalance the contradictions which possibly exist between the quest for African unity and the quest for Arab Unity.

From here, we proceed to review the foreign policy of Egypt towards the Arab World.

Efforts to unify what is now the Arab World can be traced back several thousand years. King Tutmosis III of Egypt (1450 B.C.), was the first Pharaoh to introduce a formal and consistent policy of political and military integration with the various Asian kingdoms in the Middle East. With Mohamed Ali as ruler of Egypt and his son Ibrahim Pasha, the governor of Syria in 1833, the pattern of Tutmosis, Ramses (1200 B.C.) and Ibn Tulun (870 A.D.) was repeated.

After the outbreak of World War II, British policy planned to build an Arab Empire in the Mashrek (the Asian Arab countries). However, the British project was doomed to failure because of territorial, dynastic and personal rivalries which divided the numerous Arab groups, and because of French and zionist intervention. As a result, instead of achieving unity and independence, the Arabs saw their lands divided and their freedom restricted. The post-war peace settlement legalized the balkanization of the Arab World. Just before the end of World War II, seven Arab countries : Egypt, Jordan (then Transjordan), Lebanon, Saudi Arabia, Syria and Yemen signed in March 1945, the Pact of the Arab League.

The purpose of the Arab League is to obtain the liberation of the Arab World from foreign colonialism and to protect and safeguard the integrity and independence of the liberated states and finally to insure broad co-operation in economic, social and cultural affairs among these different countries. The League contributed to the liberation of eleven Arab countnries which later became members of the Arab League.

There were however setbacks. The League failed completely to liberate Palestine from Zionist colonialism. Furthermore, the formation of the United Arab Republic (the Union of Syria and Egypt (1958 — 1961), the formation of a confederation between the UAR and the Kingdom of Yemen (1958 — 1960), the project of the great Maghreb (Algeria, Marocco, Tunisia), the project of a tripartite confederation between Baghdad, Damascus and Cairo (March 1963) are examples of sub-regional Arab attempts at unity which all failed completely.

Again, the results and the consequences following the June war in 1967 between the Arab World and Israel were a new blow to the quest for Arab integration.

To conclude, we may ask : What are the causes of the failure to achieve Arab integration ? What are the reasons for the inadequate realization of the basic aims of the Arab League ?

Although the Arab States may have been able to overcome dynastic oppositions and the political opposition between aligned and non-aligned Arab States, they failed to overcome the problem of under-development. Economic or political integration among under-developed countries is certainly more complicated than an association of developed and non-developed countries, or an association of developed countries only.

A negative aspect of Arab non-alignment must also be noted. While it may offer the possibility of an independent policy and a ground for a common foreign policy among the eighteen Arab countries, it forecloses any support from the West or the East for Arab integration.

No practicable method has yet been agreed upon by all the Arab states for the elimination of zionist colonialism in the Arab World. This inability to reach or to apply a workable solution to the decolonization of Palestine is a major obstacle to the realization of Arab unity.

Nevertheless, Arab integration is a must and the Arabs cannot fail to respond to this challenge if they want to overcome the problems of arising from micro-nationalism and underdevelopment.

The first official manifestation of Egyptian neutralism in the cold war came on June 30th 1950 when Egypt, a member of the U.N. Security Council abstained from voting in favour of the United States resolution requesting the United Nations to intervene in Korea. After the Revolution of 1952, Egyptian neutralism was given a new impetus and strengthened by the conclusion of an Indo-Egyptian treaty of friendship on April 1955 which contributed to the transformation of Egyptian neutralism from a national policy to an Afro-Asian ideology.

The Bandung Conference of April 1955 widened and extended the former trend and enabled Egyptian public opinion to see neutralism as a part of the general Afro-Asian movement to contract out of the cold war. The agreement concluded in September 1955, between Egypt and Czechoslovakia for the supply of heavy weapons liberated Egypt from Wastern military tutelage. Before this agreement, Egypt and other Arab states had relied completely on the West for their supplies of arms and ammunition.

The Brioni conference on July 20th, 1956 advanced Egyptian neutralism from an Afro-Asian movement to a world wide movement. The participation of Yugoslavia, a European country meant that neutralism was adopted not only by countries which refused alignment with Western colonialism powers, but also by countries which rejected alignment with the Soviet Union.

The Belgrade Conference of non-alignment (September 1961), the Cairo Conference (October 1964), the Lusaka Conference (September 1970) produced changes in Egyptian neutralism and new concepts were added. Among them, the division of the world into poor nations and rich nations, neutralism being the new political attitude developing countries ought to adopt in international relations to overcome poverty and underdevelopment.

The 15 years treaty which was concluded between Egypt and the Soviet Union in June 1971 seemed to imply that to a certain degree Egypt has abandoned neutralism and non-alignment. This is not correct because Egypt is still able to maintain an equilibrium between her relations with the Western World and her relations with the Eastern World. There are different examples which demonstrate the desire of Egypt to counterbalance her close ties with the Eastern bloc by maintaining and reinforcing her ties with the Wost. The special political relation with France, the construction of the new pipeline between Suez and Alexandria by a western capitalist consortium, the maintenance of American oil interests in Egypt, are among these examples.

So far we have dealt first with the attitude of Egypt toward Africa and then the attitude of Egypt toward the Arab World and finally the policy of Egypt toward neutralism. In evaluating these three policies we must recognize that they encounter tremendous difficulties. Colonialism and racial discrimiination are stronger than ever in the southern part of Africa and in Palestine. The Arab League finds difficulties after more than 27 years of existence in promoting Arab integration and cooperation while on the other hand the different subregional associations are still in the process of formation. Non-alignment is in crisis and lost its momentum partly owing to the end of the cold war and the rapprochement between the Soviet Union and the United States.

Some commentators have asked whether Egypt reaps any advantages from adopting a dynamic policy in Africa or in the Arab World or with the nonaligned countries. Should Egypt not accept more modest ambitions ?- Will she not be compelled to renounce her active role in Africa or in the Arab World or with the non-aligned countries and apply all her energies to the more prosaic task of developing the country as a modern state ?

The foregoing analysis attempts to show that the unique geopolitical position of Egypt does not allow the country to adopt any such policy of selfish retreat. It imposes on her a dynamic foreign policy which compels her to meet a new challenge and discharge her obligations in the context of the ever increasing problems which face all the poor countries of the world.

Educational Development :

EDUCATIONAL PROBLEMS AND PROSPECTS IN EGYPT

By

Mohamed Mahmoud Radwan [*]

Educational Problems and Prospects in Egypt is such a wide topic, that I will attempt to restrict may talk to one specific field of Egyptian education. Thus I shall try to speak of the three main aspects of the problem, as follows :

1. The present situation.
2. The main problems which we face.
3. Our future expectations.

I shall offer : first a real incident that we relate to our children, as a sort of intelligence test, and second a quotation from the book written by the late President Gamal Abdel Nasser immediately after the revolution of July 1952 « The Philosophy of the Revolution ».

I hope to find in both the incident and the quotation what can adequately substitute for a historical background.

As for the incident, it actually took place in the early years of this century in Upper Egypt. Our great national leader Saad Zaghlool (very much like George Washington or Abraham Lincoln to you) was at the time, the man in charge of education, and he was paying a visit to a primary school in that part of the country. In one of the classes of grade one, he asked the young children the following question;

« There were 10 birds on a tree. A man came by, and shot down three birds with one shot. How many birds remained on the tree ?

All the children hastened to give the number of 7, with the exception of one child, with the name of Ismail, who said that no birds would be left, as they would fly away after the first shot ».

Saad Zaghlool admired the wit of the boy, and ordered that he would be offered free education (you see at the time education was very costly). Yet, the British counsel for education, and we had a British counseller for every ministry at the time, objected. Zaghlool insisted, and the whole cabinet threatened to resign. Public opinion

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(*) President of the Teachers Syndicate, and Under Secretary, Ministry of Education.

boiled, and newspapers critically commented. At last, the British counsel had no choice but to submit.

The story did not come to an end. That young child continued his education here and abroad, to become later on the pioneer of educational and psychological studies in Egypt. He left his post as the Dean of the High Institute of Education, only to become the Minister of Education in the early years of the revolution. The child Ismail El Kabbani grew up into the man who had the leading role in the educational reform in Egypt. Although many years have passed since he died, we cannot discuss the development of education in Modern Egypt without referring to the prints of that great man.

Please do not forget the story. We will come back to it after a while.

As for the quotation from the book, « The Philosophy of the Revolution », I resort to it as an ideal analysis of the Egyptian society at the time, and the social and cultural contradictions that prevailed in it. Gamal Abdel Nasser wrote :

« I sometimes consider the state of an average Egyptian family — one of the thousands of families which live in the capital of the country.

The father, for example, is a turbanned fellah (or peasant) — a thoroughly country fellow. The mother is a lady of Turkish descent. The sons attend schools following the English educational system. The daughters attend schools following the French educational system.

All this in an atmosphere in which, the thirteenth century spirit, and twentieth century manifestations, intermingle, and interact.

Nasser commented . « I see all this, and feel in my heart of hearts, that I know the cause of this bewilldering perplexity which is torturing our minds, and this astounding confusion, which is destroying our very existence. I, then say to myself, surely our society will crystallize, surely, it will be solidified, surely it will be welded into a strong homogeneous whole. All that is required, is to strain every nerve, to hold our ground, during this period of transition ».

Let us stop here for a while and try to think of the concepts that I intended to present through the introduction I have just offered. Frankly speaking, I can safely conclude that the incident of the young child, and the quotation from Abdel Nasser's book, represent the most important bases for the philosophy of education in Modern Egypt.

First, I shall deal with the concept of the young child's incident. At the time, education offered by the State was divided into two types :

1. Public education, so-called AMIRI — starting with the primary stage to be followed by the secondary one that led in its turn to high or university education. This type was for money, for fees that were so high that only wealthy people could afford to pay them.

2. Elementary education which lasted for four years and which was free. This type of Education led to a standstill, or a blind alley.

This structure meant that public education was intended for a special class — the class of those who could pay. The state was quite generous in financing, and supporting that kind of education, providing it with modern buildings and equipment as well as with properly trained teachers. The curricula included the learning of foreign languages, a sign of aristocracy at the time.

Moreover, that kind of education was the open type, leading to the posts of leadership in the community engineers, doctors, lawyers, political leaders and ministers. This simply meant that such posts were confined to a special class that consisted of a few thousands, leaving the millions deprived of education. Even the few who could go to the elementary school, usually met a blocked path way that led them back to illiteracy in a few years time after they left school.

In addition to these two types of government schooling, there were foreign schools, owned by religious missions or by foreign organizations. Their fees were even higher. There was also religious education at the institutes of Al Azhar, yet their curricula were restricted to Islamic studies and the learning of the Arabic language.

All this, meant only one thing : the masses were deprived of educational opportunities; thus depriving the community of certain promising abilities that existed, within those masses.

Now, if we consider the young child's incident and ponder why the British counsel insisted on objecting to the fact that he would be offered free education, one may think that the budget could not handle the burden of free education. This was true to a certain extent. But to tell you the truth, I dare say that the British counseller's objection was totally based on his fear that Ismail's case would be taken as a precedent which would lead to a situation whereby the children of the poor might join public schools, a situation which could result in the opening of the eyes and the minds of peasants and laborers, who would consequently, claim their rights to live and to enjoy liberty, and the opportunity for independence. This in itself constituted a danger that colonialists feared most, and they did their utmost to avoid.

Reformers adopted the motto for the first time, « equal educational opportunities » (which appeared in a report prepared by the late Ahmed Negeib el-Helaly, Minister of Education in 1943). This was immediately followed by the famous call offered by our great man of literature Dr. Taha Hussein. He came out with the theory known later as that of « Water and Air », meaning that education is the right of every man, the same as he has the right to the water he drinks, and to the air he breathes.

In 1950, just two years before the revolution, some free public primary schools were opened. The revolution asserted that one of the most important bases on which our educational policy was to be founded *is that it is the democratic right of every citizen to receive education, regardless of wealth or social status.*

Now let us turn to the quotation from Nasser's book which represents the second basis on which our educational system was founded. The contradictions presented by that quotation give an example of the extent to which the Egyptian society suffered from such conflicts in everything : in wealth, in interests and in culture. President Nasser referred to that society as the society of the half per cent, as only one half percent of the population owned more than 90 percent of the country's wealth. Interests were conflicting because of the prevalence of capitalism, feudalism and inequality of opportunities even before the law. The conflict in culture was, partly, the result of that dualism in education.

Thus, one of the main objectives of the 1952 Revolution was to eliminate differences among the classes. This led to the enforcement of certain political and economic measures. Education had a leading role in all this, as it is through education that thought unity, or what sociologists call likemindedness, can be achieved, consequently, the second basis for our educational policy came to be *the achievement of thought unity through the abolishment of dualism in education, as well as through offering equal educational opportunities based on abilities, and aptitudes.*

The revolution started implementing its proram for the establishment of a socialist society based on efficiency and justice. It adopted a policy of comprehensive planning in order to achieve economic development through doubling the national income every 10 years, an aim that necessitated the adoption of the policy of industrialization. This necessitated that special attention be given to the planning for the preparation and the development of human resources in order to offer a full productive labor capacity based on a free choice of work. This required several studies on labour power, in order to define the supply and demand in each field of productive activity.

Thus, the third basis on which our educational policy is founded came to be the aim to link educational and training plans with economic development programmes, and to provide the required labor power adequately in quantity, in quality and at the right time.

For to us education is not only a human democratic right for every citizen, but it is also a means for serving the community. Education is the ideal means through which individual efficiency can be raised, and through which the rates of economic growth may be increased.

Having presented the three main bases on which our present educational policy is founded, I would like to offer you an analysis of the extent to which we have succeeded in achieving our educational objectives within the framework of these three bases.

1. In order to offer the masses their democratic right to educational opportunities and in order to cope with the striving of these masses for education, three matters were to be achieved :

(a) A vast expansion in the establishment of schools of all kinds.

(b) Free (public) education.

(c) Offering equal educational opportunities for all based on abilities and aptitudes.

Nearly all of these have been achieved. Free education was designed to cover all stages in 1961, including higher and university education. As for expansion it should be mentioned that the number of pupils in primary schools (compulsory from the age of 6 to the age of 12) went up from 1 1/4 million in 1952 to about 4 million in 1973; that is, the number tripled in about 20 years. As for the preparatory stage (equivalent to the junior-high school, and extending from the age of 12 to that of 15), the number of students went up from 350,000 in 1953 to 1,170,725 in 1973. In the secondary stage (equivalent to the senior high school and extending from the age of 15 to that of 18), the number went up from 90,000 in 1952 to more than 321,803 in 1973. In technical schools, agricultural, commercial, industrial, and technical schools for girls, the number went up from 18,000 in 1952 to 295,323, offering an increase of more than 16 times.

2. In order to provide for equal opportunities for all and in order to offer them the type of education that may better suit their abilities, capactities and aptitudes, regardless of wealth or social status,

and in order to achieve thought unity and social homogenity in a way that may not clash with the individual abilities of students, it was imperative to get rid of dualism. Thus, the primary school was made one uniform compulsory type, meant to receive all children between the age of 6 and that of 12, providing them with a minimum of educational requirements and ending in the Primary Certificate Examination. Most of those who pass the exam, join the prep (junior-high) school for three years during which the pupil receives an adequate amount of general education, and during which his abilities and aptitudes are explored. At the end of the three years, he sits for the General Preparatory Certificate Exam. Most of those who pass are directed to the secondary (senior-high) schools, either general or technical.

The general secondary stage covers three years. The first year offers all students a general type of education. In the following two years the student specializes either in the literary section, or in the scientific one. During this stage the student picks up a second foreign language, in addition to the one he started to learn in his first year of prep stage. The general secondary school is terminated with a general exam for the General Secondary Certificate which qualifies holders to enter universities, high institutes and the institutes of technicians.

As for the technical secondary stage, it covers three years also, during which the students are prepared for the different fields of production as skillful workers.

3. Beyond this the state extended a modest effort to further the education of those who are handicapped either physically or mentally. Although, the existing schools for those do not accommodate more than a limited percentage of them, that percentage is steadily rising, especially now that other state departments and social organizations are contributing, to this field of special education.

4. In addition to the above, we allow for private schools, owned by organizations and individuals. These schools, which charge fees, accommodate about 20% of those enrolled in general education with its three stages. Moreover, several institutes affiliated with Al Azhar follow the same curricula of the public schools with more emphasis on religious and Arabic studies.

This is the general framework of our educational system, yet the picture may be further clarified through a hrief survey of some of the problems we do face.

1st) In spite of the great expansion we have achieved, in spite of raising the educational budget to more than four times its size in 1952, and in spite of the thousands of schools established by both government and public efforts, the availble vacancies are still short of satisfying the wide striving towards education. In primary schools, for example, only 80% of those within the age of compulsory schooling are accommodated. Moreover, not all those who complete their primary schooling join the prep (junior-high) school, and many of them drop back into illiteracy.

2nd) Social and economic facters contribute to the phenomenon of dropout in the primary stage. About 20% of those who join the primary school drop out before they reach the sixth grade. This factor, in addition to the previous one, contributes to the increased percentage of illiteracy.

3rd) The large expansion in quantity could not be achieved without some cost of the quality to a great extent. Due to the comparatively limited number of primary schools, we have been forced to introduce the system of two-period (split session) schooling per day in most primary schools in urban centres and in many rural areas. Even in some prep schools, two sessions per day have had to be applied.

The density of pupils surpassed all reasonable rates and proved to be a serious handicap to the teacher, especially when the matter is concerned with individual care and attention that need to be given to certain students.

As a result of this overpopulation many schools had to give up their extra-curriculur activities in order to convert halls and playgrounds into class rooms.

The problem of those whom we had to evacuate from the towns of the Suez Canal Zone, made things look more serious. We have taken all the pupils into the existing schools thus forcing the density in schools up to very high figures.

Expansion in equipment and educational aids could not keep pace and all this was at the cost of the quality of the educational process.

4th) I have mentioned that, to-day we do not just consider education as a service, but we take it as a national investment. Thus, during the last few years, we have resorted to educational ec-

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onomic studies, in order to make sure that returns are suitable. Yet, one of our problems is that we face a great deal of human and economic wastage. The dropout problem and the recurrence of illiteracy can only verify this wastage. Automatic promotion in the primary stage led to a serious drop in the standard of pupils, and we had to introduce a system of testing in order to hold back weak pupils in the fourth grade, and next year we shall introduce the same system in the second grade.

The problem in the prep and secondary stages is not one of dropouts, but it is mainly the problem of those who are not promoted from one grade to another and have to repeat. We still are largely dependent on the classical promotion examination system.

A question that may arise here is : Would repeating a grade cure the causes that made a student fail and repeat ? It is a problem that requires further investigation, especially since the percentage of those who fail in the three general certificate exams is very high : 45% in the primary, 35% in the prep, and about 40% in the secondary.

5th) Not all who finish one stage join the following one. Every year there are many who end one stage of education and do not join the following stage. Some of them repeat the final exam in order to improve their credits, yet a large number, face life without having been properly equipped for it.

Another related problem for discussions :

Are we to revise our curricula so that they may include professional and technical culture ? Are we to add training centres that follow each stage ? Or does the solution lie in the introduction of the comprehensive school ? Or the system of polytechnical Education as has developed in the socialist countries ?

6th) The preparatory stage is meant to uncover the students' abilities and aptitudes in order to be directed properly in the following stage. Yet, what happens, is that students are distributed according to their totals of marks. Those with the highest usually prefer to go to the general secondary schools, Others are forced to go to the technical secondary schools and the institutes of teacher preparation. Thus, no guidance is involved and the non-general school is forced to suffer from the comparatively lower standard of its students.

7th) In 1953, enrollment in technical secondary schools was limited to 16% of those who passed their prep certificate exam, and the percentage could be raised this year to 52% Nevertheless, the percentage of those who join the general secondary school is still too high, a situation that leads to the overcrowding of universities and high institutes. In the long run, this leads to a surplus of experts and clerical workers, at the time the country faces a shortage of labor at the intermediate and technical levels.

This situation also leads to a surplus in the number of those who take up theoretical studies. The state is forced to employ them, even in fields that they were not prepared for, a matter that may have serious consequences on the efficiency of production.

8th) The secondary technical school prepares skilled workers. Lately its curricula have been developed in order to provide students with an adequate amount of general culture along with technical culture and training. A more recent trend is to link these schools with factories and production corporations. Entrance to a university is offered to those who excel among the students of these schools.

Nevertheless, we face a shortage in those technicians who stand in between the skilful laborer and the expert who graduates from the university. Because of this, few technical schools, of five years, have been established. In fact, we need to expand more in such schools.

9th) Teachers of the primary stage are prepared in Teachers Institutes controlled by the Ministry of Education. The problem lies in the preparation of teachers for the prep and secondary stages. They graduate from the university, but no planning is practised in specifying the numbers required in each specialization. Thus, faced with a shortage of some specialities, education is forced to depend upon university graduates who are not professionally qualified and who may not be willing to take up the teaching profession.

During the last few years, we are facing a serious shortage in teachers for the prep, and secondary stages, along with a drop in standards. These problems are partly accounted for by the fact that the teaching profession lacks strong incentives, a problem I dare say is felt by you in America and in other parts of the world as much as we feel it here.

Most of the problems I have presented, need further study and proper treatment. Most of them, as you can see, are due to financial difficulties. In spite of the conditions of the war, the state spends generously on education, yet educational reform requires very large funds that possibly could meet the requirements of school buildings, equipment, and incentives that could attract more suitable elements to the teaching profession.

When we come to consider the future, our hopes look up for the realization of a number of objectives, some of which are the following :

1st) To accommodate all those who are within the age of compulsory education in the primary school, we hope to attain a percentage of 100% by the year 1980 according to the program of National Action presented by President El Sadat in July 1971.

2nd) Extending the duration of compulsory education to nine years, that is till the age of 14 or 15, thus covering the present prep (junior-high) stage. This may result in the establishment of the 8 or 9-year school.

3rd) To develop the curricula of general and technical education in order to make them match better in relation to the universal progress of science and technology on the one hand, and with the requirements of production and service to the state on the other.

At present we are experimenting on new syllabuses of Modern Mathematics and science. Teachers are trained in teaching these new syllabuses in order to propagate them. Educational television is also widely used.

Lately an Educational Research Center was established. It is hoped that the center will undertake educational research work and experimentation that may lead to an improvement in the educational process and the standard of performance, along with books, syllabuses, teaching methods and so on.

4th) An unfortunate consequence of the expansion in education has been the directing of the educational progress towards academic achievement more than towards training students for the ability to undertake research and practise thinking, or, toward promoting their ability to educate themselves and find solutions to the problems they encounter. The development of the student's individual personality has been much neglected in many schools.

We hope to raise enough funds for providing what we need of buildings, equipment, labs and other visual aids.

5th) Although great efforts have been made in order to link education with the plan of economic development, yet, these efforts are still lagging behind, mainly due to the inefficiency of surveys made in order to define the quantity of supply and demand of labor power in every profession and field of specialization. Such surveys are most vital for the setting up of an efficient educational plan.

6th) The theoretical feature still prevails in most subjects offered in the primary stage and in the general prep and secondary stages. We hope to find a way for making the necessary link between theory and practice, between technical and general education, between technical education and productive work.

This year we started an experiment of an 8 year school through the cooperation of the Democratic Republic of Germany on the basis of polytechnique that aims at mixing scientific knowledge with applied experience.

We also hope to develop the curricula of primary schools in rural areas, coastal regions, and desert areas, so that they may become more closely related to the environments where they stand.

7th) One of our great hopes is to achieve an open system of education that would allow for lifetime education, and for permanent training of workers.

8th) We are giving increasing attention to pre-school education, especially since until now this kind was completely left to a few private schools.

A long speech is always boring but to an educationalist any speech on education is a short one. Before I conclude, I would also like to tell you how welcome you are among colleagues. No one can deny that such meetings are liable to foster inter-cultural understanding, and to promote peaceful co-existence among the nations of the world.

TEACHER EDUCATION AND IN - SERVICE TRAINING IN THE ARAB REPUBLIC OF EGYPT

By

El-Demerdash Sarhan [*]

Any educational policy or any philosophy of education is just mere ideas and hopes, until it has been converted into an educational experience for the learner. The teacher being the one who organizes and guides this educational experience, should be capable of interpreting ideas and hopes and converting them into a tangible reality. Thus, the close relationship between the educational policy of any society, with all its aims and means, and the system of teacher education and its philosophy and means can be seen.

When the main function of the schools was the transmission of culture, teachers were selected from among graduates who had good mastery of the subjects to be taught. However, when the attitude toward education changed the importance of preparing the teacher increased in significance. Developing countries have come to realize the importance of preparing teachers in special institutes, as education is considered different from other professions and thus requires special preparation.

After world war II teacher education in Egypt was influenced by many favorable factors. In 1944 free education for all in the primary stage was adopted. There was a ruch for primary education as well as for other types of education.

This rush required some measures to be adopted to cope with the shortage of teachers. Many schools for the preparation of primary school teachers were opened and programs were started to recruit as many candidates as possible. The Higher Institute for Teachers was opened to prepare the holders of the secondary school certificate in four-years to become teachers in secondary schools. In addition to this, there was also the Higher Institute of Education to prepare university graduates to become teachers in secondary schools after a two-year course in educational subjects. There were also several institutes for preparing teachers in particular subject matter areas : physical education institutes for men and women; music institutes for

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women; fine arts institutes for women and domestic science; institutes for the preparation of teachers of arts and practical subjects.

However, all these institutes could not cope with the need for schools for teachers. Consequently, more than twenty thousand teachers were appointed without educational training.

A major aim of the 1952 revolution was the creation of a new society in which all persons could realize their potentialities and use their skills to build a future in which all could have the opportunity to enjoy a happy life. Hence, the revolution has had to depend upon education for the development of the potentialities inherent in individuals. New attempts have been made to re-establish the educational system on the basis of equality of educational opportunities and of considering education as a propelling force. Thus, the revolution had to realize that any new policy of education must depond on the quality of the teacher who can convert this policy into practice. The most important factors which have affected the teacher education policy are :

1. The new educational policy required expanding education and developing new curriculum and methods. This necessitated paying attention to the teacher as the one on whose shoulders lay all those responsibilities. A first step was to increase the number of teacher education institutes to meet the increasing demand for teachers of all types. Also the standard of teacher education needed to be raised and new curriculum and teaching techniques needed to be developed in order to prepare teachers who would be able to realize the aims of the new curriculum.

2. Arabic Socity underwent rapid changes as a result of the revolution. It thus became incumbent on the school to reconsider its policies and techniques to keep pace with changes lest it should lag behind the changing society. It was natural that the schools should depend first and foremost on the teaching staff. Hence, the need arose for discussing the teacher's role in these changes and their adequacy for coping with them.

3. The new philosophy and outlook of the Republic, as represented in the national charter, shed light on the new role to be played by education and the responsibilities to be undertaken by teachers. Teachers needed to cope not only with the present, but with the future of the Egyptian nation both inside and outside the Republic. This required a re-consideration of the role of the teacher to rid it of all the anomalies accumulated all through the ages and to fit it to this new philosophy.

4. The United Arab Republic stepped forward to assume its role in leading the development of life in the other Arab countries as well as in African and many Asian countries. This has led to the United Arab Republic undertaking many responsiblities, the most important of which is spreading education in the countries that are in need of it. Thousands of teachers are needed for undertaking this noble mission. It was but natural that this should effect teacher education policy in regard to the numbers to be prepared every year. Teachers need to be educated to meet local needs and to meet the needs of other countries while at the same time quality standards had to be maintained. Consequently, several trends in teacher education came into being after the Revolution.

Education has become a process for the sound formation of the individual, physically, mentally, spiritually and behaviorally(1), in line with the objectives of society. This attitude has also been crystallized in the National Charter that has defined the aim of education as « enabling the individual to re-mould life(2) ».

Consequently, the Ministry of Education determined standards of proficiency required for teaching at all levels of general and technical education in which it was necessary to have both special and vocational preparation(3). It was natural to make a comprehensive plan to provide the schools with teachers having these standards. One step was providing of in-service training programs for teachers who had not been prepared for the profession.

Interest was not confined to the special preparation of teachers for their job but was also accompanied by raising the standard of this preparation. This can be clearly seen in the measures taken by the State in this respect. Among the measures are.

(a) Considering the preparatory certificate the requirement for admission into the general teacher training schools, instead of the primary certificate.

(b) Increasing the number of years of study at the general teacher training schools for the preparation of teachers for the primary stage. Instead of being three years after obtaining the preparatory certificate, the program was increased to four years in 1961 and then to five in 1962.

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(1) The United Arab Republic : The Central Ministry of education : *The Educational Policy in the U.A.R.* No. 9, Dec. 1960.

(2) *The National Charter*. Chapter Five.

(3) Ministry of Education : In-Service training Department : *Basic Standards of Proficiency for Teaching Staffs in General and Technical Education*, Nov. 1960.

(c) Developing the study at these schools and paying attention to the selection of the teaching staff with the aim of raising the standard of the preparation of the teacher for the primary stage.

(d) Developing the study at the faculties of education with the aim of raising the standard of the graduates both scientifically and *vocationally.*

(e) The in-service training programs, organized by the Ministry should play an effective role in bridging the gaps in the preparation of teachers and in developing their scientific and vocational growth.

As a result of the change in attitude towards education and the interest in the teacher as citizen and social guide, the curricula and plans of teacher education began to change. Teacher education included four complementary aspects(1) : preparation in the subject he teaches; vocational preparation; general cultural preparation; personal and social preparation to qualify him for the leading role he undertakes in society.

New courses have been introduced in the curricula of teacher training institutes and faculties, such as, courses of environmental service, the study of Arabic Society, socialism and the 1952 Revolution and camps in the teachers colleges. In addition attention is paid to various sports and social and cultural activities.

In the light of these general trends, the plan of teacher education in Egypt is based on the following(2) :

(a) Teacher training policy should be connected with the educational trends, policies and needs of the country.

(b) Plans for educational expansion at any stage should always be connected with the policy of teacher education. This will help avoid the need for employing emergency teachers or educationally unqualified ones.

(c) Teacher education should keep pace with the different aspects of life in society and the new developments in social, psychological and educational studies.

(d) Teacher education should meet the increasing responsibilities of the school and the services expected from the teacher in society.

(e) Teacher education should keep pace with the financial means and economic conditions.

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(1) Ministry of Higher Education : *Teachers College Bulletin*, 1962.

(2) The Central Ministry of Education : *General Bases For Teacher Education.* No. 1, April 1960. p. 8.

Besides these general bases, there are other bases for selecting the teacher and for developing the course of his preparation. Among the most important bases for the selection of the students, are the following :

(a) The condidate should have a minimum standard of culture and mental maturity on which to establish a preparation program. Such programs can be evaluated on the basis of the qualification to be obtained before joining the institutions for teacher education. This varies according to the educational stage for which the student is to be prepared to teach in. However, there is a trend toward unifying this standard on the basis of considering obtaining the secondary certificate as a prerequisite for joining the teacher training institutes and faculties(1).

(b) The candidates who want to join the institutes and faculties of education should have strong personalities and the ability to lead and guide besides having an interest in the teaching profession. Therefore, an interview is held for the candidates with the aim of discovering these qualities.

Today the teachers of the primary stage are prepared in the general teacher training schools scattered all over the educational zones. The candidates for these schools are selected from among the holders of the preparatory certificate (6 years primary plus 3 years preparatory).

The duration of the course is five years. In the first three years, the students study general subjects comparable to those dealt with in general secondary schools. The last two years are mostly devoted to special courses in one of the following areas :

1. Religious education, Arabic and social studies.
2. Mathematics, science and horticulture for men students and domestic science for women students.
3. Music education.
4. Physical education.
5. Arts and crafts.

In the last two years (fourth and fifth forms), besides the specialized subjects, there are also methods of teaching in each section

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(1) This trend was evident in the studies presented in the conference for raising the standard of primary education held in July 1963. (e.g., The study presented by the Teachers College in Cairo, entitled : The Primary School Teacher and how to Help him Achieve his Mission).

(one period every week), and a study of primary school curriculum (one period). Teaching practice starts in the fourth form and the students are trained as class room teachers and subject matter teachers. A part from the above mentioned courses, camping is compulsory for all specializations starting in the fourth year.

All students are boarders. As a rule, there is no co-education at these institutes unless the number of boys and girls is not great enough to have two separate schools.

The graduates may work as classroom teachers in the first four years of the primary school and as subject matter teachers in the fifth and sixth years. Gifted graduates can be admitted to one of the faculties of education if they satisfy certain requirements.

The teaching staff at the institutes are all qualified. An instructor of educational subjects should have at least an M.A. degree in education or the special diploma awarded by the faculty of education, two years after the B.A. or B.Sc. Competent secondary school teachers are sometimes delegated to help as part-time instructors.

Teachers of secondary and preparatory schools are trained in the university faculties of education. The training of these teachers takes one of two tracks.

The first track is a system where a student is admitted to a one-year course after he has graduated from either the faculty of arts or the faculty of science. During this year, the student studies at the faculty of education subjects about education and psychology and has teaching practice in praparatory and secondary schools. At the end of this year, the graduate is awarded « The General Diploma in Education ».

The second track comprises both academic and educational training in one of the faculties of education, there are now ten. Students, after obtaining the secondary certificate, attend a four-year course where they study their major subject as well as educational and psychological training. It is worth while noting that both systems are co-educational except the Girls College at Ain-Shams University where only girls are admitted.

Teachers of technical schools as well as art teachers, physical education teachers, music teachers and domestic science teachers are all prepared in specialized higher institutes and colleges under the supervision of the Ministry of Higher Education. The students can join any of these higher institutes and colleges after obtaining the secondary certificate and they have a four-year course comprising cultural, specialized and vocational subjects, teaching practice in preparatory, secondary or technical schools.

In-service training has become closely connected with that of teacher education. Most inservice education has been directed toward the training of primary school teachers because their standard of training was far behind that of the secondary school teachers.

The first real attempt in the field of in-service training occurred in 1955 when the general training center of the Ministry of Education was established. Some other regional centers established in various educational zones followed its example. Thousands of teachers, headmasters, and inspectors have received in-service training in these centers.

A variety of programs have been given including qualifying programs for unqualified teachers, refresher courses for teachers of different stages, methods of teaching, aids, school administration, guidance, and so forth. There are also special programs for teachers delegated to teach in other Arab, African or Asian Countries.

There are in-service training programs for education leadership. They aim at training those who are eligible for promotion to headmasters, senior masters and inspectors. Candidates take their training at the faculty of education for one academic year. Those who satisfy their examinees are qualified to take leading posts at the Ministry of Education. Thus as can be seen in-service training programs cater to the needs of different people engaged in the educational field and working at different stages of education.

It must be evident from this quick survey of teacher education in Egypt that it has become an important element in the national plan for the social and economic development of the country. This survey also indicates that much progress has already been made toward the goal of equal educational opportunities for all. However, many studies are needed to throw more light on the various aspects of the problems of teacher education in Egypt, particularly as they relate to the selection, admission, preparation and in-service training of teachers.

THE ROLE OF HIGHER EDUCATION IN THE MODERNIZATION OF EGYPT

By

M. N. El-Mahallawi *

The word « modernization » as used by several speakers has various meanings. When one speaks about the role of the university in modernization, one does not simply mean the introduction of new technological devices in daily life. Attention must be given to the necessary preparation of the society and to the social values of those who are going to make use of this new technology. One must also study the implication of the use of such new technological tools on the mode of life and social interrelations.

I do not mean here by modernization, « transplantation » of a new civilization by imitation from one of the prosperous countries, or simply the adoption of more recent ideologies because they are « modern ». Such a procedure is not possible in a country like Egypt with its roots from ancient civilizations and its dominant religious tradition and conception of family life. Even if the above type of modernization were possible, it would not be desirable because most of the modern societies have got their own difficulties and disadvantages which they want to get rid of.

What we mean, therefore, by the role of the university in the modernization of Egypt is the duty to help the society in the adoption of some aspects of contemporary civilization and culture. This with the aim of complete assimilation into the original indigenous culture, the objective always being the welfare of man and the prosperity of the community.

In this part of the World, perhaps the oldest universities existed and prospered. The university of « Un », or Heliopolis, was known to exist in the 40th Century B.C. and to have within its walls « the most wise » men on earth, as Herodotus mentioned.

Later, in the Fourth Century B.C., the Alexandria Library and University helped to conserve and promote human knowledge for

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several centuries. Euclid and Archimedes were among its many scientists and philosophers.

Egypt Existed as one main center of human culture until the rise of Islam, when a very active movement of translation of science and philosophy into Arabic was started. Later, in the 8th Century A.D., in Baghdad, the « House of Wisdom » was established, where Gaber Ibn Hayan, the first chemist, El-Khowarismy, the founder of Algebra and El-Kindy, the famous astronomer, worked and added to the wealth of human knowledge. All through this history, these various institutes of higher education contributed to the prosperity of this region.

In more recent years, higher education in Egypt was reactivated in the various fields of technology. These included :

	Year
The School of Engineering	1820
The Schools of Med. & Vet. Sc.	1827
The School of Agriculture	1829
The School of Law	1868
The House of Sciences (Dar El-Eloom)	1871
The Higher School of Teachers	1880
The School of Commerce	1911

Any rapid study to the conditions of life in this country in that era, shows very clearly that these institutes of higher education contributed to a rapid rise in the social conditions, wealth and power of the country. So much so that some European political powers started a struggle for domination over this part of the World.

The University in its modern sense, however, was started by public subscription, which saw the creation of the « National » University in 1908. Later, in 1925, it was endorsed by the government and the Schools of Law and Medicine were affiliated with it. That was the nucleus of Cairo University of today. With the increase of population and the increased demand on higher education, new universities were established. These include today :

Alexandria University	1942
Ain Shams University	1950
Assiut University	1957

It is sometimes mentioned that the University is « for the student ». One can suggest that in the present concept this may be modified to be : « the university is for the community through the student ».

The role of the university will therefore not be limited to supply the student the latest scientific theories, and technological achievements, but to see that these scientific and technological achievements are being put into use for the benefit of the society.

This has been attempted in various forms and means. It is sometimes emphasized that the « University is the Professor ». Individual activities of prominent professors can therefore be regarded as some of the contributions of the university to modernize Egypt.

For example, the first rector of the Cairo University, Lotfy El-Sayed, layed the foundation for liberal thinking and made the decision to admit girls to the university against some resistance. That decision has served well the future of modernization of family life and in supplying equal opportunity of work for women and finally has aided in extending them political rights in public elections.

Another example is the effort done by Dr. Taha Hussein, the Dean of Faculty of Arts and a Minister of Education, who, during his work as professor, struggled for the rights of free thinking and free expression. He succeeded finally in making education available to all citizens without any financial barrier. One can also say that the original effort to establish universities and their struggle for a healthy existence is in itself an important effort on the modernization of Egypt.

Another attempt of the university to, itself, modernize and to promote Egyptian society is the rapid growth of university education in response to the needs of the community. The increase in the number of admissions and total enrollment being partially the result of the increase of population, but mainly it reflects the increased demand of the public for higher education. The role of the university here is to satisfy the public's demand within the actual needs of the society. The total admissions therefore may be increased, but it will be directed to specific areas, such as applied sciences as opposed to pure sciences. Admissions to the Faculty of Medicine will be increased until Egypt can get an equilibrium between the number of doctors and the needs of the health service, and so on.

A third form of fulfilling the role of the university in the modernization of Egypt is the establishment of new specializations and centers of research. To give few examples : the Cancer Institute (in response to pilot epidemiological studies showing the relative importance of the disease); the Bilharzia Institute; the Middle East Research Center; the Public Service Center.

A fourth means by which the university tries to direct its role in modernization on the correct course is the special structure of the governing committees and councils of the various universities. The faculties and university councils have in their membership four members from outside the Universities. Also the committees of postgraduate studies and research, both in the faculties and in the universities, have members from various areas of industrial and civil service to ensure that such councils and committees will be aware of the needs of the society. This is done also to insure the conducting of research in such areas that the scientific activity of the university can supply.

Such developments has succeeded in helping the universities define their objectives. A survey of the curricula of post-graduate education and of research activity and scientific publications clearly demonstrates that the university has, until now, successfully tried to play its role in the modernization of Egypt.

THE ROLE OF INSTITUTION OF HIGHER EDUCATION IN NATIONAL DEVELOPMENT

By

Mohamed M. Hassan *

Higher educational institutions are considered the principal source of knowledge and source of the supply of highly qualified humans. Experience in the past few years in Egypt has proven that the objectives outlined by planning organizations and the corresponding expected results do not always agree completely with the output of those institutions. In many cases, they do not even relate to them.

The attempts that were recently made, during a comprehensive analysis of higher educational institutions, aimed mainly at finding an ideal link between the existing specializations in higher learning and the corresponding technical and professional qualifications needed by society. They determined it was essential for any developed plan to include in its framework a methodology for analysing the structure of educational institutions. It was also agreed to examine the structure of the educational body in charge of staff preparation. This called for the definition of certain ratios and measures.

These include the ideal ratio between the number of students and that of professors; the ideal distribution of resources among educational establishments and administrative personnel; the distribution of teachers to avoid duplication or dissipation; the appropriate limit of the ratio between the activity to be spent in research and that in teaching; the least and utmost limits for preparing a student in higher educational institutions; the length of study periods in every field of specialization.

Starting from this objective study basis, it is possible to outline the general trends for growth, their effects on higher education. These include establishing new curriculums, balance between literary studies and humanities on the one hand and technical and technological studies on the other, taking part in the devlopment of society, relations with industry and project management, and the role of the university in adult education and in-service training programs.

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As to scientific research, it is undoubtedly useful to define the present research programs so that the results of this definition would be a source of information for academic and non-academic institutions and for those organizations in charge of planning. It is also preferable to make a list of the needs of development in the various research fields.

The second half of the Twentieth Century has witnessed a special interest in higher education in most countries. This is evident in the committees and conferences held, and in the studies and reports made on the subject at the national and international level. This interest is also shown in the efforts made by governments and concerned organizations to develop and expand higher education. As a result, the number of students in the world almost doubled during the period from 1950 to 1960 alone(1), the rate of growth varying from one country to the other. The motto in some advanced countries has become « Give the opportunity of higher education to all those who are able and willing ».

The reason behind the concern for higher education all over the world is that the strength of a country in the circumstances of modern times is not in the number of its men, nor in what nature has it endowed with. The principal measure of its strength - economic, social, political and intellectual - lies in what that country makes for the provision of effectively educated persons, particularly at higher levels, so that they can efficiently direct the country's policy, during peace and war alike. No wonder then that the two most powerful countries in the world, the USA and the USSR, have enough universities and colleges to accomodate almost 50% of the total number of students in higher education in the whole world.

In their constant concern with higher education and its expansion, many countries concentrate on the practical and technological sides of education because of the important role which science and technology play in the strengtgh and advance of modern society. It is noticeable that the size of this sector of education has become so big in developing societies that the students in these fields present a high percentage of higher education population(2).

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(1) The number of students in the world increased from 6,712,000 in 1950 to 11,460,000 in 1959.

(2) The figures which UNESCO collected about 74 developing countries in 1960-61 show that 44.2% of the university and higher institute students in those countries study engineering, medical, natural and agricultural sciences and that engineering sciences alone came first of all specializations of higher education.

Egypt has been faced with a kind of duplication in higher education. The historical origin of duplication in higher education in our country goes back to the beginning of the nineteenth century when an attempt was made to build Egypt into a modern country. This attempt was associated with, or even depended on, the presence of scientific and technical cadres necessary for work in the civil and military sectors. Here was the start of the different higher institutes like engineering (1800), medicine and veterinary medicine (1827), and agriculture (1829). They were all similar to what actually existed in some advanced European countries, in France in particular. These « vocational » higher institutes were founded outside the frame of *al-Azhar* which was the national university then, and which, as a result of the centuries of isolation and retardation, confined its studies to lingual and religious theoretical sciences and limited its task to just the preservation of a cultural heritage. This was the first picture of duplication in higher education in our country.

At the beginning of the twentieth century, the Egyptian University was founded. This foundation was associated with a traditional concept which did not differ from that known in Europe during the nineteenth century and before. This concept meant that the university was the place for lofty « free » thoughts and studies, which tend toward the academic side. The political, economic and social circumstances of the country during the first half of the twentieth century helped to confirm this outlook. This again left the door open for duplication in higher education. The result was the successive foundation of higher institutes which were not originally university colleges, but for which there was urgent need, such as fine arts and applied arts, higher teachers college, physical education, musical education, art education and home economics institutes. Some agricultural, commercial and industrial institutes were also founded to ensure the practical side at this level of education, and to produce the necessary number of teachers for the technical secondary schools.

The number of non-academic higher institutions and colleges has increased from 1952 to 1965 to forty four containing more than 35,000 students. There are, in addition, the two year technicial institutes which contain more than 15,000 students.

The most important factors that helped the expansion of non-academic institutes and colleges are : the desire to compensate for the extreme theoretical academic trend in some university colleges, by introducing study at a higher level broad enough for the applied as well as for the theoretical scientific sides; the relative ease in establishing higher institutes and distributing them all over the country;

the desire to face the deficiency in the training of technicians, specially in the engineering sector; the overall planning and its concern to tie higher education plans with those of economic and social growth, so as to produce enough skilled man power; the new concept of the principle of equal opportunities for access to education, which is the corner stone in the realization of social justice, the fair geographic distribution of this service at a high level, and its delivery to the people regardless of geographic or economic handicaps.

Higher education in Egypt has developed and interacted with the society in which it exists. During the first year after the foundation of the University in 1925, the task of the University was to supply the state with an educated class in order to occupy lower government jobs. Most of the University applicants joined the Faculties of law, commerce or arts. The practical Faculties absorbed only a small percentage of the applicants. The Revolution being ware of this situation, returned the balance between the students joining practical colleges and those joining theoretical ones in order to supply the country's needs for scientific people who have enough knowledge of technical methods to qualify to face the demands of economic and socal growth.

Being aware of the tremendous responsibilities thrown on it, the universities underwent an overall redevelopment. Its most distinctive duties have become the following :

1. To provide specialists with a high standard of knowledge and skills. This necessitates the university to be in a position which enables it to catch up with the fast changing scientific and technological advancements of the twentieth century.

2. Serious work for the sake of creating successful scientific schools that sponsor research which broadens science, confronts the problems of our society, ensures development, and strengthens new industry and modern agriculture.

3. That the university opens its doors to all classes of people who prove their fitness and capability to continue education.

4. That the university is a lighthouse for true socialist idealogy and scientific research concerning the questions of Arabic socialist application, and a center for the study of our Arabic society in the past, present and future.

5. To keep pace with the international trends, and not to confine higher education to the capital only. Since such centralization hinders the realization of the equality of opportunity for all capable youth of the country.

There is no-doubt that scientific research and graduate work are considered as the most important aims of the university, as they are the only means for forming scientists and future researchers for Egypt to catch up. As a result of the keen realization of the necessity of following the scientific ways and of directing scientific research to solve the problems of our society, the state has provided the necessary facilities for scientific research and for encouraging graduate studies.

Various ideas have peared during the last seven years concerning the position of higher institutes and non-academic colleges within the framework of higher education in the country. These opinions vary among themselves in part or in whole. Some said to liquidate these institutes until they are completely dissolved, others to keep and enforce them, others to stabilize them, or most of them, outside the framework of the university while defining their objectives, others to put them inside the framework of the university in order to strengthen their positions, others to keep some of them below the standard of the university and outside of its framework, others to expand them outside the university while confining acceptance of students in the latter to the smallest possible number in order to be able to graduate the specialists, finally, some advocated limiting these institutes and binding them to particular specializations.

Actually the question concerning non-academic colleges and higher institutes is not mainly as to whether they should remain outside or join inside the framework of the universities. The real question is whether they fill certain real needs, correct actual distortions in the structure of society, participate effectively in the battle of social and economic development in the country, provide educational services at a high level to the areas where people are unable to reach the universities.

It is known that with the increase in the country's utilization of technology, its advancement toward industrialization, the development of agriculture on a scientific basis, the improvement of production networks, and the scientific trend in administration, public works and services, the need for technicians becomes more apparent. In fact, the occurance of this increase, advancement and development relies greatly on the existence of skilled man power, and technicians in particular.

The experiences of various countries differ in the preparation of the two levels of technicians, regular and specialized. Some train them in the same institutions and some train them in separate ores. One at the level of specialized secondary school and the other at the level of the university.

Our country is in bad need for institutes to train technicians at their different levels. Therefore, the problem within our higher educational system is not that of joining the technical higher institutes with the university and turning them into faculties of the universities, but of binding the objectives of these institutes with the responsibility of the university.

These institutes can be educational organizations which can penetrate deep into the country, introducing advanced educational services to the citizens, and overcoming many geographical and economic obstacles. This expansion of higher institutes deep into country side is not only a means for realizing social justice, but is also a way of offering the various regions of the country the opportunity for serious development, and giving the people of these regions the chance to develop their own community. These higher institutes could then form new horizons for scientific acheivement in which science interacts with practice, and education with socity; something which our society lacks to a great extent now.

This is what was done in advanced countries, particularly in countries of the socialist world. This might be the reason why higher institutes, and technical ones in particular, present the largest sector of higher education in those countries.

To improve and operate the educational process with reasonable efficiency, means first of all the development of a sufficient teaching staff, qualitativly and quantitativly, a fact not to be ignored if real progress is to be acheived. The Planning Department in the Ministry of Higher Education established certain norms for members of the teaching staffs to be applied until 1974 - 75. In the meantime, these norms should be constantly imporved until a high standerd of higher education may be a chieved.

In the light of the needed number of teaching staff, compared with the number of those actually teaching, the picture of the present deficiency in quantity and quality existing in higher institutes and non-academic colleges becomes apparent. This deficiency resulted from the great increase in the numbers of students during the last ten years which has not been matched by an appropriate increase in the teaching staffs. To make up for this deficiency in the teaching staff needed for various specializations, the Ministry of Higher Education has prepared a plan based on attracting excellent elements of qualified persons working in public organizations. Presidential Decree No. 1512 was passed in 1969 concerning the transfer of university cadre. This decree gave the opportunity for excellently qualified people working in organizations to join the teaching staffs in the higher institutes.

It is evident now that there is an urgent need for taking quick measures for founding a technological university that includes, as a corner stone, the presently existing technological higher institutes which have enough potentials, to help them realize their role and carry out their message. This will include enriching Egyptian thought in the field of technological knowledge, and participating in the development of our society while training the technologists who will participate in developing its production.

There is no doubt that the training of the technologist differs from that of the present university educated engineer. While the university is concerned with theoretical and academic training, education of the techonologist necessitates the emphasis on application and the ability to follow up scientific development in order to carry out the technological application of the results of scientific and theoretical research.

The training of the technologist requires complete flexibility in management and preparation, close ties with industry and with other levels of technicians. The theoretical side also should not be forgotten, especially that the experiences of our times, muclear and space, have not all been put at the service of production.

The tchnological university aims at forming technological leaders at the highest level by offering bachelor degrees, master degrees, doctorate degrees, and graduate study diplomas. It also aims at increasing the technical efficiency of old engineers by retraining them, in order to keep pace with the new evnts of scientific and technological developments in their fields of work.

Because of the importance of linking educational institutions, which supply supervisory levels of technicians and leading levels of technologists and the knowledge of modern research trends, and developments in technical and technological applications, it is essential that the university supervises the formation of technicians at the supervisory level. It also should give advanced studies to the proficient, and raise the technical efficency of the old by means of refresher courses. In addition, one of the important aims of the technological university is to spreed technological consciousness among citizens, and to enrich their thoughts with new technical styles through free studies.

TECHNICAL EDUCATION AND TRAINING PROGRAMS

By

Mohamed M. Hassan *

In view of the immense technical development taking place in Egypt, technical and vocational education has become one of the objectives of the state's educational goals. At the secondary school level, the enrolment in industrial secondary schools increased from 15,722 in 1959/60 to 75,007 in 1970/71 ; enrolment in agricultural secondary schools increased from 9,001 in 1959/60 to 32,024 in 1970/71, and for commercial secondary schools, the number of students increased from 28,130 to 157,179 during the same period.

At the higher educational level, enrolment in industrial institutes increased from 1,304 in 1959/60 to 13,422 in 1970/71; in agricultural institutes, the number of students increased from 1,419 in 1959/60 to 7,301 in 1968/69 and decreased thereafter to 1,619 in 1970/71, because of transfering these institutes into University Colleges according to the last reform which took place in the higher educational sector. For commercial institutes, the number increased from 1,093 in 1959/60 to 9,101 in 1970/71. At the University level, enrolment in the engineering colleges increased from 9,454 in 1959/60 to 22,489 in 1970/71; in the commercial colleges, the number of students increased from 19,641 in 1959/60 to 27,884 in 1970/71, and in the agricultural colleges, the number of Students increased from 5,464 to 22,389 during the same period.

The educational system in Egypt, as it affects the technical education and vocational education, involves programs in three separate Ministries :

(a) The Ministry of Education ;

(b) The Ministry of Industry ;

(c) The Ministry of Higher Education.

(*) Undersecretary of State, Ministry of Higher Education.

The Ministry of Education, besides the regular system of general education, maintains a system of technical education at the secondary level as well as the specialized schools for preparing technicians. Students admitted into both levels are among the preparatory school general graduates, and the duration of study is three years for the technical secondary and five years for the specialized schools.

The Ministry of Industry maintains apprenticeship programs of accelarated training for adults and up-grading of workers.

The higher level of education embodies the universities, the higher institutes, and the technic institutes at the post-secondary level.

Technical and vocational education are defined as the forms of education provided in schools, or other educational institutions, in order to prepare persons for occupations in such fields as industry, commerce and related services. Occupations in these fields are arranged in three categories according to three respective levels of education namely :

(a) Education at the level of the skilled worker;

(b) Education at the level of the technician;

(c) Education at the level of the engineer or technologist.

According to the definitions given by the General Conference of UNESCO at its Twelfth Session, Dec., 1962 :

(a) The term « skilled worker » applies to persons who have received a broad education and training in the exercise of a trade or craft in a particular field;

(b) The term « technician » applies to persons working in the occupations requiring a knowledge of technology and related sciences between that of a skilled worker and that of an engineer or technologist. Occupations at that level may call for inspection and maintenance, writing of detailed development plans and supervision and production work;

(c) The term « engineer or technologist » applies to persons working in occupations for which the need of education in appropiate sciences in universities or equivalent institutions of higher education is officially or traditionally recognized; this level of occupations would cover such activities as research, development, organization, planning and production.

Applying these definitions to Egypt's system of technical education in the engineering sector, education at the level of the skilled worker takes place in the secondary technical schools and the apprenticeship training centers run by the Ministry of Industry. The latter is a combination of school instruction and in-plant practical training organized in one of the trades.

Education at the level of engineer or technologist takes place at the university and the higher institutes level. The university prepares the academic engineer and the higher technical institute prepares the technological aspect of occupations.

After six years of compulsary primary education, the educational system of Egypt is organized in three levels : the preparatory level; the secondary level; the post-secondary and higher education level.

In addition, the Ministry of Industry maintains three types of training in the industrial field : apprenticeship training; accelerated training; up-grading of workers.

There are also some additional vocational schools for training in practical activities such as the nursing schools for girls, the girl schools for hygienic and social workers, the schools for postmen, the schools for telegraph, the schools for farm land and tax collectors and the institutes for wireless operators. These schools belong to different ministries and enterprises and admit mostly graduates of the preparatory schools.

The technical preparatory level started as an experiment to provide those who are not accepted in the general preparatory schools with adequate technical knowledge and manual skill which will enable them to participate in the process of production in industrial firms, commercial department stores,...etc. with a reasonable degree of efficiency. Three types of education were included namely; industrial, agricultural, and commercial each having its special schools and sometimes combined in one school called a multi-purpose preparatory school. Experience showed that this type of education at this level did not fulfill its objectives for the following reasons :

(a) Admitants at this level are still too young to determine their abilities and readiness for a particular type of education;

(b) This level does not lead to upper levels of education;

(c) The cost per-pupil in this type exceeds that at the general preparatory school level;

(d) Facilities for training in these schools cannot fulfill the objectives of this type of education.

Because of these reasons and the expansion taking place in general preparatory education, this type of school has vanished leaving the general preparatory education, the only type of education at this stage.

The technical secondary level follows the preparatory stage and its duration is three years. It selects its students from among the graduates of the general preparatory level. The schools of this type were originally established as a terminal stage but they have been recently reformed on the basis of admitting the distinguished of its graduates to join suitable higher institutes and colleges and also to join some of the university faculties. The secondary level aims to provide the market with skilled workers who have a background of technical and general knowledge which enable them to supervise the execution of industrial agricultural, and commercial projects in big firms, government departments and private organizations. The plan for extending technical secondary education is based on the opening of the three types included (industrial, agricultural, and commercial) in the capitals of the governorates and large cities.

The apprenticeship training centers are run by the Ministry of Industry and some industrial enterprises. These centers are working along the two-shift system in order to increase their efficiency. In the first five-year plan of social and economic development (60/61 — 64/65), 41 government training centers, besides 10 other training centers belonging to different industrial enterprises, have been established. Plans for 64/65 — 71/72 were made to establish an additional 26 such centers to make a total of 77 centers. The plan of these centers includes a nation-wide apprenticeship scheme in all the apprenticeship trades in industry, as well as accelerated training for adults and upgrading of existing workers (in service training).

The apprenticeship system was introduced in 1956 on a pilot basis in metal working trades as a combination of school instruction and in plant training. The duration of the course is three years; the first year is for basic training in the vocational training center and the other two-years are for practical training in the plants of the participating enterprises. Apprenticeship training was then extended to other vocations which were recognized as needed by industry. These includ automotive, electrical, textile, building, glass, leather-tanning, mining, industrial chemistry, fine mechanics and electric trades.

The accelerated training program was introduced as the result of the great need for a large number of semi-skilled workers in a short period. A pilot training center for metal trades was established in 1960 on the accelerated training system. The duration of the course was 24 weeks for each of the fitting and turning courses; 16 weeks for gas and electric welding. The accelerated training program was then extended to building, textile, leather-tanning, and glass trades and set up in the evening shift of the standard training centers. The Ministry of Labor introduced recently a system of accelerated training, similar in principle to that applied by vocational centers of the Ministry of Industry aiming to train unemployed adults needed in the sectors of housing, public utilities, construction, communication and transportation.

The third program of the up-grading training came as a result of the need to raise the productivity of workers by improving their skills and teach them the latest techniques of their trade in shorts practical training courses. This program includes the following up-grading courses : heat treatment, grinding, machine shop maintenance, textile machine maintenance, automotive maintenance, general electrical maintenance, and textile machine setting. The duration of the program depends on the kind of trade selected and lasts from several weeks to more than one year. For the ones that last one year, the period is divided into three phases and the worker can attend one or more phases, return to work for the firm for a certain time; and then come back to the training center to continue the course.

Technical education embodies two levels.

(a) post-secondary education (technicians institutes);

(b) higher education (higher institutes and university faculties).

All studies carried out for estimating requirements in the long-run indicated that there is an acute shortage in the group of « Technological Engineers » i.e., graduates of the higher institutes. The main difficulty in this problem is the shortage in buildings, equipment and the qualified teaching staff for such institutions.

With respect ot the category of « technicians », which is very essential for the execution of the social and economic development plan, especially in the field of industry, the number was far below what was needed in the employment structure. Accordingly, preparation of this level started in the academic year 1966/67 in two fields :

(a) the industrial field;

(b) the commercial field.

For this purpose the technical institutes have been established with two years of study. Students admitted into these institutes are selected among the general secondary graduates. The study now covers 23 branches of specialization in the industrial fields and six branches in the commercial field. Certain incentives have been awarded to encourage students to enroll in these studies. This new type of technical education is considered a leading experiment in the Arab countries for the solution of this problem.

Another plan suggested for this purpose, is to prepare this group of students through a period of five years of studis after the general preparatory education by means of specialized schools.

Concerning technical higher education, i.e., the source of the category of specialists, there are two means of preparing them :

(a) the university colleges of engineering prepare the academic engineer ;

(b) the higher institutes prepare the technological or applied type of worker.

The second type of preparation includes specific technological studies for certain specializations needed for development. To achieve such a purpose these institutes work with related enterprises in order to plan for a proper policy of admittance to prepare the required numbers with the best quality.

It is recommended that these higher institutes will be the nucleus of the future technological university. Admittance into higher institutes is increasing gradually, especially after developing them to meet the increasing demand.

Continuous study is taking place since the stablishment of the Ministry of Higher Education, to estimate the requirements from all types and levels of education in a long period of time i.e., 15 - 20 years.

Such study is considered as the basis of the proper plan for achieving the required balance between the demand and the supply sides.

Technical education has been developed rapidly since 1952 especially since the begining of the social and economic development planning which started in 1960. Thus it is of great importance to study the development of various types and levels of technical education in terms of admitted students, enrollment, and graduates from the base year 1959/60 up to 1970/1971.

The teaching staffs in technical and vocational education at the secondary level should be composed of graduates from universities or institutions of an equivalent level. The teaching staffs for the education of technicians should possess a higher degree in the appropriate field plus practical experience in the particular descipline. At the engineering and technological level, the Ph. D. or an equivalent degree is the essential qualification for the teaching staff.

Among all the requirements required to prepare the large numbers of skilled laborers and technicians the teaching staff for technical education is of utmost importance.

Requirements in the categories of skilled laborers and technicians in the field of industry during the period 1960 — 1980 amounts to 940,800 and 199,500 respectively with an annual average of 59,300 and 8,100 respectively. Accordingly, the required number of teachers for the secondary technical level during the same period are estimated at 8,000 teachers, with an annual average of 650 teachers.

The level of such teachers has been studied from the academic and the technological point of view as well as the pedagogical side. It is agreed that such teachers should be provided with an adequate course in each of these aspects.

For this reason, the faculty for technology and education had been established by the academic year 67/68. Students admitted into this college are selected from the industrial secondary graduates. The graduate of this college is considered a pedagogical engineer.

The advisory committee of UNESCO recommended this faculty to be the source for providing the Arabic countries with the teachers for industrial secondary schools and the technicial institutions. An agreement regarding this is to be prepared by the U.N.D.P. and Egypt. This project will serve many other purposes besides its main objective such as : to be an example to be adapted in any Arabic country, for preparing in-service training and other training programs for improving teachers; to be a regional center for technical and technological education studies; for developing the curricula; for preparing books and educational means; as a center for regional seminars.

It is well known that with the increase in a country's utilization of technology, the advancement of its agriculture on a scientific basis, the improvement its production network, and the scientific trend in administration, public works, and services makes the need for technicians and technologists more apparent.

While the university is concerned with theoretical and academic education, the education of the technologist necessitates the emphasis on application and the ability to follow up scientific development, in order to carry out the technological application of the results of scientific and theoretical researches.

Thus specific attention must be given to the institutes for developing technicians and the technologists in order to achieve the target of meeting the increasing demand for these two types.

TABLE I

Number of Students Admitted, Enrolled and Graduated
in Technical Education in A.R.E. (1959 — 1971)

Type and Level of Education	Admittants		Enrolment		Graduates	
	59/60	70/71	59/60	70/71	59/60	69/70
Technical Secondary for Girls	—	2299	—	7128	—	1783
Industrial Secondary	5906	23561	15722	73007	3601	16089
Commercial Secondary	8654	49696	28130	159179	4810	23844
Agricultural Secondary	3068	10625	9001	32024	2298	8566
Total Technical Secondary ...	17628	86181	52853	271338	10709	50282
Industrial Technicians Inst. ...	—	2516	—	4431	—	1193
Commercial Technicians Inst.	—	5748	—	10595	—	3369
Total Technicians Inst. (1) ...		8264	—	15026	—	4562
Industrial Higher Inst.	469	3304	1304	13432	42	1288
Commercial Higher Inst. ...	379	1842	1093	9101	—	1172
Agricultural Higher Inst. (2)	722	518	1419	1619	—	511
Total Techn. Higher Inst. ...	1570	5664	3816	24152	42	2971
Engineering Colleges	2454	3818	9454	22489	857	3572
Commercial Colleges	4196	7726	19941	27884	2886	3774
Agricultural Colleges	1633	5806	5164	22389	859	3147
Total Tech. Colleges (3) ...	8283	17350	34559	72762	4602	10493

Notes :

(1) Technicians institutes started in 1966/67 by 1520 and 1008 students in the industrial and the commercial fields respectively.

(2) The intake and enrolment in the agricultural higher institutes amounted to 2786 and 7301 respectively in 1968/69. These were transferred into university colleges in 1969/70.

(3) Engineering, Commercial and Agricultural colleges of Azhar University are included.

TABLE II

TOTAL ENROLMENT IN HIGHER INSTITUTES : A.R.E.

(1971 — 1972)

Type of Institute or College	Number of Students Male	 Female	 Total
Higher Commercial Institutes	8265	3296	11561
Higher Agricultural Institutes	1682	402	2084
Higher Industrial Institutes	14256	1282	15538
Higher Institute for Art Education	435	569	1004
Higher Institute for Musical Education	143	145	288
Colleges of Fine Arts	1509	1037	2546
Colleges of Applied Arts	919	463	1382
Higher Institute for Physiotherapy	2290	1599	3889
Higher Institutes for Physiotherapy	145	150	295
Higher Institute for Social Services	974	1078	2052
Higher Institute for Home Economics	—	1033	1033
Higher School for Languages	277	372	649
Higher Institute for Hotel Study	111	—	111
Higher Institute for Tourism	69	115	184
Totals	31075	11541	42616

TABLE III

NUMBER OF STUDENTS GRADUATED IN HIGHER INSTITUTES : A.R.E.

(1970 — 1971)

Type of Institute or College	Number of Students Male	 Female	 Total
Higher Commercial Institute	638	322	960
Higher Agricultural Institute	210	33	243
Higher Industrial Institute	1361	105	1466
Higher Institute for Art Education	152	103	255
Higher Institute for Musical Education	27	33	60
College of Fine Arts	227	120	347
College of Applied Arts	160	59	219
Higher Institute for Physical Training	435	370	805
Higher Institute for Physiotherapy	16	8	24
Higher Institute for Social Services	102	99	201
Higher Institute for Home Economics	—	235	235
Higher School for Languages	48	84	132
Totals	3376	1571	4947

TABLE IV

NUMBER OF FULL TIME TEACHING STAFF IN HIGHER INSTITUTES : A.R.E.
(1971 — 1972)

Type of Institute or College	Number of Staff Professors	Assisent Professors	Lecturers	Total	Miscellaneous Others	Demonstration Leaders	Total
Higher Commercial Institute	13	50	12	75	21	179	275
Higher Agricultural Institute	11	36	52	99	1	110	210
Higher Industrial Institute	17	75	61	153	30	474	657
Higher Institute for Art Education	22	16	11	49	3	53	105
Higher Institute for Musical Education	3	21	11	35	12	52	99
College of Fine Arts	15	11	12	38	2	136	176
College of Applied Arts	13	35	13	61	9	112	182
Higher Institute for Physical Training	30	50	52	132	51	330	513
Higher Institute for Physiotherapy	3	2	4	9	1	22	32
Higher Institute for Social Services	5	9	10	24	3	72	99
Higher Institute for Home Education	6	63	6	75	27	54	156
Higher School for Languages	10	18	14	42	15	29	86
Higher Institute for Hotel Study	1	1	—	3	2	3	8
Higher Institute for Tourism	1	1		2	—	—	2
Totals	150	389	253	797	177	1626	2600

REGIONAL CENTER FOR FUNCTIONAL LITERACY IN RURAL AREAS FOR THE ARAB STATES

By

Abd El-Gabbar Wali *

The Arab countries are witnessing radical changes in their social and economic structures as part of the world-wide movement toward the achievement of overall development. This is the result of the growing concern of these countries to make a fuller use of the technological advancement for the purpose of making a fuller utilization of their natural resources. The obvious reason being to improve the quality of life of their peoples.

To that end there is an increasing recognition among the Arab countries that education has become not only an essential part of the achievement of development, but also an important part of the process. It is for this reason that these countries have started to reform their educational systems and policies in order that education can contribute to development as well as to provide equal access to all types of education for all of the people.

Realizing that the percentages of illiteracy in the region reach a median of 62% and thereby have a tremendous effect in impeding development and human progress, the Arabic countries have been giving marked attention to literacy and adult education. This is evidenced by the following measures and activities that have been taking place during the past few years. These developments include :

(a) the promulgation of special literacy and adult education legislation;

(b) the stablishment of new departments for literacy and adult education within the ministries concerned;

(c) the involvement of several ministries and departments in literacy and adult education activities, these being no longer considered the responsibility of one sole minnstry or department;

(*) The Arab States Regional Center for Functional Literacy, Sers el Layan, Egypt, (ASFEC).

(d) the revision of existing educational materials and the move toward the preparation of new types of materials and aids which meet the needs of both the individual and society;

(e) the increase, although modest, in funds allocated for literacy and adult education.

More significant is the fact that there is a growing trend, in most of the Arabic countries, to link literacy and adult education programs and projects with development schemes. The purpose being to achieve the targets set up for the Second Development Decade. This trend is based upon the conviction that economic, cultural and social development should be integrated into one process. Literacy and adult education have an important role to play in this overall process which aims at the improvement of the quality of life in the framework of integrated life-long education.

In their endeavors to formulate and implement these programs, the Arabic countries are faced with various problems which they have to solve. Foremost of these is the need for qualified, well-trained personnel. These people are needed to take charge of the various aspects of the activities e.g., planning, organization, administration, training of trainers and animators, assessment and evaluation of needs and problems, preparation of educational materials and aids, as well as other matters. It should be added that these individuals are needed at both the national and the local levels.

In order that these people can be effective in achieving their objectives for successful fulfillment, literacy and adult education programs have to be based on knowledge of the realities of the situation in industrial, agricultural and other development schemes. This emphasizes the need for conducting studies intended to explore and identify problems and educational needs. Findings of such studies can then be used in the sound preparation and implementation of literacy and adult education programs.

The preparation of adequate and effective educational materials and aids looms large among the needs of the Arab countries. In this connection, there is general dissatisfaction in the quarters concerned in these countries regarding educational materials and aids focusing on the teaching of the three R's with no bearing on the immediate environmental conditions and problems. These quarters are anxious to avail themselves of basic materials and aids that are linked with the problems, needs and interests of illiterate adults. In addition, adequate post-literacy materials, leading to the improvement of the socio-economic efficiency of manpower, with their content based on modern science and technology, are also needed in the Arabic regions. The preparation and production of prototype materials can provide models to be used or modified at the regional level according to specific needs.

There is an increasing interest in the use of mass media in adult education and literacy programs in the Arabic countries. This is evidenced by the demand for TV and radio programs for the improvement of the efficiency of learning and the solution of problems, e.g., education of women and reaching illiterates in remote areas among others. The use of mass media for such purposes gives rise to the need for adequately trained personnel, research studies on the uses of mass media in literacy and how adult learners respond to mass media and literacy, the production of suitable programs, and the rendering of technical and advisory services in the field.

There is a growing recognition by the Arab countries that it is not enough to provide education for the illiterate population. Of equal importance is the need to create a literate environment that is corducive to the improvement of the quality of life and which helps overcome the problem of a relapse into illiteracy. The creation of a literate environment is a complex task which depends on, among other things, the existence of a collection of well written follow-up literature. In order to'be functional, the content of such literature needs to draw upon modern scientific knowledge and technology. Such literature needs to be presented in simple and graded style. As of the present follow-up and post-literacy materials are almost non-existent thereby constituting a gap in the Arabic library.

Although there is a growing tendency in the Arabic countries toward the involvement of the various bodies and institutions concerned with literacy and adult education to become invovled with the problem there is still a need to coordinate activities. Workers educational institutions, literacy departments, universities, adult education agencies, development schemes, educational institutions, governmental bodies, non-governmental agencies, and different popular education movements all should work together to develop a comprehensive program.

Scientific research is also needed to assess educational needs and priorities and to evaluate literacy programs. It should also be applied to testing materials, methods, and approaches with a view to improving their efficiency and helping solve problems encountered in the implementation of such programs.

Each Arab country feels that it should share the experiences of other Arab countries in the fields of literacy and adult education. Each country feels that it is not alone in its struggle against illiteracy. Hence, the need for the exchange of experiences, information and documentation between the Arabic countries and between them and other countries outside the region is a prerequisite for ultimste success.

In addition to the above-mentioned needs, there are still other needs resulting from special problems faced by and characteristic to the Arabic regions. Because of some traditions that are reminiscent of the past, literacy programs still do not reach the women whether in rural areas or in industrial enterprises. Other groups whom can be cited as problems of the region are the nomads, the sedentarized groups, the planned communities, the migratory workers and the refugees. All these and other problems need special attention in terms of the training of personnel, research work, preparation of educational materials and relevant advisory services.

The foregoing represent only the major needs felt by the Arabic countries in respect to the development of literacy and adult education programs. These needs have been expressed by official Arabic sources on a variety of occasions, particularly in conferences, seminars and other similar meetings convened at both the international and regional levels.

It should be pointed out that the Arabic countries are alert to the benefits to be derived from new concepts of integrated life-long education and to the need to create a self-learning society. This calls for studies on how to adopt these concepts in the Arabic regions.

International and regional cooperation is required to meet these needs in order to achieve the goals of the Second Development Decade. Such cooperation obviously calls for long-term planning, action and support.

ASFEC is a regional center established to render services to all the Arabic countries in the field of literacy and adult education. With its different pattern of operation, this Center has acquired a fund of experiences which enable it to play an important role in the training of manpower to participate in a country's overall development, especially in rural areas.

Since its establishment in 1969 as a center for functional literacy, ASFEC has been mainly concerned with the promotion of functional literacy as a training method for development as well as the reorientation and improvement of existing literacy and adult education programs. In this respect, it has been charged to perform the following functions to meet the needs of the Arab states :

(a) the training of cadres (administrators, planners, organizers and training officers);

(b) the production and distribution of prototype educational materials;

(c) research and studies;

(d) advisory services.

In performing these functions, the Center has started to reshape its training and other activities along two main lines :

First, to achieve broader regionalization of its services through organizing regular courses, on the Center's premises and in surrounding areas in the host-country, for all the countries of the region, and through holding field operation seminars outside the host-country, particularly on a regional and sub-regional basis, when requested, e.g., the field operational seminar held in the Sudan in January 1971.

Second to widen the scope of its operational activities with the primary purpose of linking literacy and adult education programs with major social and economic development schemes and projects in the region, e.g., the field operational seminar in the planned communities near Alexandria, Egypt, in May 1971.

ASFEC proposes to organize forthcoming field operational seminars in Tunisia and Libya and in the Gulf area in 1973. With the agreement and help of the other Arabic states the Center could organize other such field operational seminars whenever called upon to do so.

These two new trends will continue to be the main guidelines for ASFEC in carrying out its functions so as to cover, as much as possible, all the countries of the region while at the same time strengthening the links with as many varied development schemes and projects as possible.

In view of the new developments and trends taking place in the world at large, and in the Arabic regions in particular, the Center is planning to enter new fields of activity linked to development.

Realizing the importance of the educated family in the development of any country, ASFEC is introducing special courses on family welfare education through integrating functional literacy and adult education components with family welfare programs in accordance with the needs of individual countries. It is also integrating family welfare education in courses of functional literacy and adult education.

In this connection it may be pointed out that ASFEC is receiving assistance from UNFPA.

In addition, recognizing the world-wide awareness of the problems concerning the human environment and their complexities in the Arabic regions, ASFEC is planning to introduce special programs of study for adults on the environment and its preservation. This should constitute a new component of functional literacy and adult education not only to enlighten adult learners of the seriousness of the problem, but also to advise them on how their activities should aim at the conservation of natural resources and raw materials, the protection of man against the harmful effects of pollution of the environment and the application of sound hygienic principles and practices.

ASFEC will continue to organize special programs to meet the educational needs of planned communities, sedentarized nomads, migratory workers and refugees, and to help solve problems of urbanization. Such courses aim at the preparation of the masses to aid them in adapting themselves to changing socio-technological conditions. Obviously, the technological aspects will be the responsibility of the specialized agencies of the United Nations or the government institutions concerned. The role of ASFEC will mainly be concerned with helping such agencies and institutions through providing the masses with the skills that are necessary to enable them to acquire the new technical knowledge and skills. By bringing the adult illiterates and semi-literates to the desired educational level, ASFEC would assist these agencies and institutions in enconomizing time and effort.

Undoubtedly, literacy and adult education can play an effective role in the implementation of rural development policies and schemes. Their programs could be adapted to serve as agents of change for the development of manpower skills which would lead to the improvement of the quality of life in rural communities. ASFEC, with its wealth of experiences in working in rural areas, could profitably organize training courses geared to rural development needs.

It should be emphasized that, instead of establishing new institutions or centers that would perform functions similar to those of ASFEC, the UN and its specialized agencies operating in the host-country could well depend on this Center to perform such functions. In this way, ASFEC would not only help such agencies economize initial capital costs involved in the setting up of new institutions or centers, but it would also facilitate cooperation and coordination in the development processes. ASFEC has started to adopt this policy by organizing special courses catering to the needs of UNDP, FAO and UNICEF projects underway in the region, e.g., training of Audio-Visual personnel for the UNDP Integrated Development Project near Alexandria, Egypt.

In the meantime, ASFEC is called upon to participate in and contribute to the work of conferences, seminars, symposia and similar meetings. These were convened at the international, regional, and national levels by the UN and its specialized agencies as well as regional organizations, e.g., the League of Arab States.

In the deliberations and discussions which took place during the Third International Conference on Adult Education (Tokyo, July — August 1972) the important role of adult education in the context of life-long education was emphasized. The Conference recommended that ASFEC as well as similar regional institutions link their literacy activities to adult education and act as agents in their respective regions for the propagation of the new trends in adult education. ASFEC can serve as a brain-trust for the spelling out of these new concepts and trends in the Arab region.

In meeting the changing needs of the Arab countries, described previously, the plan of operations of ASFEC for the period 1973 — 1978 will reflect the following characteristics :

(a) Broader regionalization :

The Center will expand its services to all the participating Arabic countries in all areas of its activities. Special emphasis will be placed on those activities linked with socio-economic development in accordance with the needs of individual Arabic countries and at their request.

(b) Widening scope of present activities :

Special attention will be given by ASFEC to widen the scope of its program activities in order to include various types of educational programs for different literacy levels including post-literacy.

(c) Expanding areas of application :

New areas of activity will be selected for the application of suitable educational programs. These areas would include education on environment, family welfare, rural development, library extension services, urbanization, and so forth. Thus, the Center's educational services would cover new clientele, e.g., nomads, planned communities, migratory workers, refugees, among others.

(d) Follow-up of programs and activities :

Special attention will be paid to following up activities of ASFEC programs, e.g., training courses and field operational seminars as well as internationally supported programs and projects whenever requested by the agencies and governments concerned.

(e) Coordinating bodies working in the field :

ASFEC will continue its efforts in stimulating coordination among all bodies engaged in or concerned with literacy and adult education in the region as well as helping to promote joint research in adult education among universities and other research institutions.

In response to the needs of the Arabic countries, the Center will, during the period, attempt to achieve the following goals with the purpose of assisting the Arabic countries in their endeavours to reduce the rates of illiteracy in the region. To do this they will link their efforts in combating illiteracy with developmental projects through providing Arabic countries with trained specialists in the different areas of literacy and adult education. Training will be organized for different categories, namely specialists in the vrious areas of literacy and adult education, organizer-trainers within development projects and animators in the various communities. This is in recognition of the fact that selective but effective manpower training and skill upgrading programs are essential factors for development and progress.

The Center is also devising different types of educational methods and techniques to suit different situations in on-going economic and social development programs. It is developing methods, materials and aids for post-literacy purposes as a step toward the creation of a literate environment which would contribute to the achievement of development. In addition 'guides and manuals dealing with the methodology and the preparation of educational materials for the benefit of literacy teachers, instructors and adult educators as well as various categories of personnel engaged in these areas can be developed.

Methods and techniques for more efficient utilization of radio, TV and other mass communication media for the purpose of their wide use in multi-purpose ends in literacy, post-literacy and the creation of a literate environment can be promoted. The utilization of such media would be integrated with educational processes linked with developmental efforts.

— The Center will conduct surveys and studies to help the countries of the region indentify their problems and needs for which literacy and adult education programs could be tailored and implemented. In this connection, ASFEC will assist the countries of the region in promoting the use of research and evaluation as an integral part of functional literacy and adult education programs in the context of social, cultural and economic development schemes.

It will undertake action research and evaluation with the objectives of :

(a) assessment of educational needs of the development projects;

(b) integrating literacy, post-literacy and other forms of adult education with life-long education.

To Help the Arab states prepare their literacy and adult education programs integrated with development plans the Center will provide them with statistical data and projections related to population and development problems in their relation to literacy and adult education.

Finally it will disseminate and exchange information related to literacy and adult education efforts and experiences both at the regional and the international levels. This would be achieved through an effective and integrated program of publication in both Arabic and foreign languages.

PLANNING OF SCIENTIFIC RESEARCH IN EGYPT

By

Tohamy A. Moussa [*]

Scientific research is the main factor in the development and promotion of Nations. It appears necessary that scientific research in developing countries should play a sounding role in the adopting and adapting of recent technology and know-how to fit local prevailing conditions and problems and consequently, find new technology originating from actual needs.

In this essay I would like to discuss three main topics concerning the scientific policy of Egypt. First, I will discuss the development of the organisations responsible for the science policy in Egypt; second, the formulation of scientific plans, and third, the problems facing the application of scientific knowledge and technology to development, and how we are trying to solve these problems.

Since the July 23, 1952, Revolution, the State has paid special attention to scientific research. The State, realizing the fact that scientific research is the real weapon of the revolutionary will, established many scientific organizations and consolidated them with scientific organizations that had already been established.

In January 1956, the « Science Council » was established. Foremost among its objectives was the encouragement of scientific research; the drawing-up of a policy to ensure the achievement of scientific progress; and furnishing the state with advice on all scientific issues connected with development and progress.

The Council has a number of scientific achievements to its credit. These include a survey of all those engaged in the various scientific fields in the country and the drawing-up of a sound policy for their training and for bridging the gaps in scientific specializations. The Council also made the first survey of scientific instruments and their classification. It has encouraged scientific research work particularly in the field of applied sciences. The Council crowned its activities by developing the first scientific plan (1960 — 1965).

(*) President of the National Research Center.

In view of the fact that the Council was not invested with executive powers, the State established the Ministry of Scientific Research toward the end of 1961. The Ministry abolished the Science Council in 1963 and established eight specialized scientific councils.

In an attempt to achieve greater coordination, the « Supreme Council of Scientific Research » was established in October 1965 and was invested with wide powers in the fields of planning, coordination and implementation. However, in April 1968 it was decided to return scientific policy to the Ministry of Scientific Research.

Undoubtedly, the changes and development introduced in the State's scientific research machinery point to the State's keen interest in science and its awareness of the important role it can play in shaping the future. The numerous changes in scientific machinery ultimately resulted in the creation of the « Academy of Scientific Research and Technology » toward the end of 1971.

The Republican Decree organizing the Academy laid a special emphasis on the State's policy regarding technological development. It also underlined the State's keen interest in creating a sound base for social and economic development.

The main functions of the Academy are :

1. The support of scientific research and the application of modern technology in all fields included in the program of economic and social development.

2. The formulation of the policies which ensure the linking, at a national level, of the scientific and technological organizations with the principal trends of the scientific and technological research which serve the national development plans.

3. The formulation and co-ordination of research projects related to national problems, financing them and following up their execution.

4. Co-ordination of the major research projects affecting the national economic and social plans, which are executed in the different institutes or departments.

5. Participation in the study of the scientific and technological aspects of the major development projects, and when necessary, recommending the establishment of new research institutes.

6. Encouraging basic research as a means of building up research personnel, and supporting research schools working in the modern fields of science.

7. Dissemination of information concerning the possibilities of exchange in international modern technologies.

8. Participation in the development of science curricula.

9. Developing incentives for scientific workers.

10. Organization of scientific publications and the popularization of science.

11. Supporting scientific societies and encouragment of holding scientific conferences.

12. Developing international relations.

I should add that scientific research in Egypt is being carried out by the research organizations attached to the President of the Academy (such as the National Research Center, Atomic Energy Organization and other specialized Research Institutes). It is also carried out by the universities and the research institutes and departments belonging to some ministries and their organizations.

FORMULATION OF SCIENTIFIC RESEARCH PLANS

There is no doubt that any success achieved is based on good and thorough planning. Accordingly, the country has recently started to plan for scientific research. Each scientific research organization in Egypt formulates a research plan for itself taking into consideration the possibilities available. The Academy is responsible for drafting a plan for scientific research, on the national level, within the framework of the state's development plan so as to ensure the fulfillment of the aims of the state.

As is well known, the following should be considered when preparing a Scientific Plan :

(a) types of scientific research upon which we should concentrate;

(b) a realistic plan to be executed;

(c) A specific method of plan preparation;

(d) Follow-up study of plan execution.

In any scientific program, whether in the form of fundamental, applied, developmental or adaptation research, subjects and priorities differ from one country to the other depending on that country's natural resources, economical, technological and social status. Although fundamental research receives a marked importance in developed countries for the promotion and development of science, developing countries should direct their research more toward local developmental problems according to the most suitable plan.

Needless to say, the scientific plan should be made on the national level in a way which attracts the interests of scientific researchers. Such a plan should be divided into well defined research problems aimed at setting-up the units of production on a sound economical basis.

It appears necessary that scientific research should play a critical role in adopting and adapting recent developments in technology to fit local conditions and, consequently, find new technologies which can lead to increased production and quality along with a decrease in expenditure. Thus in Egypt, we should concentrate at present on projects such as problems created by the building of the High Dam, and the combating of agricultural pests which cause great economic loss. Again we have to think seriously about elementary items such as the exploitation of our basic assets and the limination of Bilharzia, which still affects the great majority of our population and seriously reduces our manpower production. Of course, these problems involve the so-called long-term research projects, yet at the same time we have to deal with specific problems in production and services which could be solved by short-term projects of not more than two years duration.

To ensure the success of any scientific plan in a country like ours *it should relate to the real needs of the country*. To be more realistic about scientific planning, local existing possibilities should be critically taken into consideration. Budgets in relation to foreseen expenses should also be carefully studied as we cannot afford any losses.

A problem which a developing country faces, even if the skilled personnel exist, is the formulation of a plan which will sustain the interest and enthusiasm of all those who will participate in it. Failure to take these measures into consideration normally results in either a total failure to realize the plan or at least a significant delay in its implementation.

Since the local possibilities available are important in drawing-up a scientific plan, steps are now always undertaken in Egypt to gather general statistics concerning :

- Scientific personnel, their specializations and the technicians available to assist them;
- Existing research units capable of participating positively in solving developmental problems;

- Scientific equipment in working condition and that which needs repair;
- Library services, with particular stress on scientific journals;
- Running research classified according to subjects.
- Results of research performed in Egypt, particularly the applied ones.

In the method of plan preparation the following procedure is used :

- The Academy Board receives the problems and proposals concerning the Scientific Plan from the specialized research councils (SRC).
- The Board selects a limited number of problems, particularly those serving the developmental programs. The SRC, or its committees then should define the scientific content of each problem in the form of research topics, make an estimate of the required budgets and time needed, propose the research unit capable of doing the job as well as the research team and its leader.
- The detailed proposed scientific plan is then submitted to research scientists in universities and research organizations for comments.
- The plan afterwards returns to the Academy Board for final decision making.
- After this step, the Academy Board then distributes the research topics among the universities and research institutes for work to begin.

The role of the Academy Board is as important in the follow-up as it is in planning. It is clear from previous practice that the biggest difficulties raised before the Science Council were because of the lack of a system to follow-up the scientific activities, and the reluctance of different organizations to provide reports concerning their research activities. Needless to say there is no use making a scientific plan if its execution is not guaranteed and no guarantee can be given unless there is a serious follow-up. Besides, the Academy will lose all power to prepare new plans unless it always remains in the picture concerning the research activities in the country, and the types of difficulties research organizations are encountering. In addition, since the Academy is financing some of the research projects from its budget, it is definitely the Academy's responsibility to see that its budget has been correctly utilized.

The proposed follow-up depends upon the following principles :

1. The follow-up of the Academy on the execution of the scientific plan should be achieved through the authorities in the research units themselves without infringing on the independance of these units;

2. Keeping in mind that the main aim of the follow-up is to solve problems facing the execution of the research;

3. That the follow-up should be based on regular reports showing the progress of the research, the results achieved, the difficulties facing the progress of the work and the proposals to overcome these difficulties.

Before proceeding to the third part of this discussion, I would like to mention that the *transfer of research results to the Sectors concerned is very important.* In order to make full use of the scientific research results, research organizations are very keen to transfer these results to industrial and service enterprises. This necessitates the establishment of close relations between such organizations.

No doubt during the past 20 years a great deal of research has been carried out in this country but, unfortunately, very few cases have found their way to application. I am sure, we have much more research which could be applied. One might ask, why was so much research carried out and so little actually applied ? An important reason for this, in the past, has been that researchers have not clearly understood the problems facing industry and service. The converse is equally important; people working in industry and service never knew clearly what was being accomplished in research centers and, as a result, rarely attempted to convey their own problems to research workers. That is why I repeat my point that the linking between the producers and the users of scientific research is vital for both, vital for industry and service, and vital for scientific research. Only through linking is it possible to evaluate progress through repeated follow-up studies.

In summary the following is necessary to achieve the success of any scientific plan .

1. The suitable scientific atmosphere and system must be present;

2. The plan should develop out of the real needs of the society;

3. The plan should be realistic pending actual existing possibilities;

4. The planing should be done by specialized scientific boards together with representatives from other concerned bodies;

5. A fixed policy should exist for financing the research related to developmental problems;

6. A system of incentives should be worked out;

7. A system for serious follow-up should be present.

NEW POLICY IN THE NATIONAL RESEARCH CENTER

Turning to the third part of this essay I will deal with *the problems facing the application of scientific knowledge to development.* This is directly concerned with how I, as a President of one of the largest research centers in the Middle-East, start to deal with these problems.

I should add here that the Center was established in 1939 but the laboratories were not actually ready for work until the end of 1955. The Center was built to serve as a multi-purpose research institute which deals with all aspects of research, basic and applied, particularly those related to industry, agriculture, public health and all other basic requirements for the national economy within the general framework of the country's plan. The Center is entrusted with solving problems which need various specializations which can not be realized in any specialized research institute. The Center is entitled to solve problems by its own capacity or by asking others to contribute. In addition, the Center may be the initiator of any research project. The center should respond to requests coming from governmental and public organizations as well as from individuals. The Center is also authorized to give grants to encourage scientific research.

During 1972, the National Research Center underwent important reforms to bring the Center closer to its objective of serving the problems of the industrial, agricultural and public health sectors. This new policy was discussed among all research workers in the Center in a series of meetings.

The new policy depends upon the following basic lines :

1. The formulation of a Research Plan for the Center closely related to the National Development Plan, including plans of provinces facing daily problems of production. It is clear that in the absence of such plans it would be impossible to direct the power existing in the Center toward the goals expected by the government. Lack of

such plans leads to dissipation of efforts which result in losses and an increase in the burdens undertaken by our developing country.

2. Bridging the gap between the research laboratories of the Center and industries, as well as other concerned bodies, i.e., the linking between producers and users of scientific knowledge and technology. No one can deny the importance of setting up close relations between scientific research laboratories and industrial enterprises. With such relations, the objectives can be realized. To overcome the problem of the lack of linkage between producers and users of science, the Center formed *specialized scientific boards*, each dealing with one main sector of production. The boards deal with all problems arising from the concerned sector as well as the development and improvement of production in that section. Examples of these boards are the boards of chemical industries, food industries, textile industries, metallurgical industries, and so forth.

Care has been given to leave the chairmanship of these boards to responsible personnel from the production side. The membership is shared between production people and people from the concerned laboratories of the Center along with specialists from other research organizations.

These boards are mainly concerned with the organization of the work in the factories of industrial organization from one side and the research laboratories of the Center from the other side. The boards then work out detailed plans for scientific and technological research which leads to direct research efforts toward the realization of developmental aims.

3. In order to reach the right solution for production problems, the scientific researcher should be fully acquainted with current practices in industry. At the same time, production people should be made aware of the role the research laboratories can exercise. This necessitates :

(a) *Establishment of field research units* in the factories and industrial organizations which can identify the problems facing the production and participate in their solutions. There should also be an exchange of experiences concerning industrial and scientific questions;

(b) Establishing a system which enables people from industry to be aware of what is going on in research laboratories;

(c) *Organizing training programs* for people working in production plants according to pre-determined plans with the aim of increasing production efficiency. Such training programs have already been practiced in various industries such as fats, oils, refractories, glass, cellulose, paper, metallurgy, textiles, petroleum, plastics, paints, rubber, leather tanning and food. They were attended by a large number of industrial personnel and some of these programs were repeated upon the request of the factories concerned;

(d) *Organizing scientific seminars* in the Center for tackling basic developmental subjects. This is done with the collaboration of the authorities in the sectors concerned.

By the aforementioned systems for combined field collaboration between the research staff of the Center and the production personnel, it is felt that most of the problems facing production can be solved.

Policy for the Establishment of Specialised Research Institutes :

The Center has the intention of establishing specific institutes each of which will serve one of the main sectors of production. Examples already in the early stage of development, are the Petroleum Institute and the Metallurgy Institute. As a first step in establishing such institutes, plans were made for the building of laboratories and suppling the necessary equipment. After finishing this phase, care was given to establish the pilot plants.

This procedure will allow for the optimum utilization of the available investments in a developing society. To that end all budgets should be first directed toward the setting up of pilot plants instead of the repetition of the building of the same type of laboratories already existent in the National Research Center. The presence of an appreciable volume of research results in the Center, which needs to be communicated to industry so that they can be applied, can encourage the adoption of this system of starting with the pilot plant phase at first.

Changing the promotion system is also included within the new reform. When evaluating the research submitted by prospective workers for the research staff, special consideration will be given to the extent of their contribution in serving developmental problems beside their other scientific research. It is felt that this procedure will definitely encourage the research staff to participate in solving the problems affecting the economy of their country.

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